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BERKELEY ON THE IMMORTALITY OF THE SOUL

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In the prefaces to both the *Principles of Human Knowledge* and *Three Dialogues*,[1] Berkeley claims that one of the products of his work will be a demonstration of the "natural immortality of the soul." Rather than writing this off either as an inconclusive argument or as a matter for religious speculation only, I wish to suggest that Berkeley's interest in the question of the soul's immortality had a marked effect on his more strictly philosophical considerations. Specifically, I wish to suggest that the immortality question may provide some insights into Berkeley's account of the self, his reduction of primary to secondary qualities, and the extent to which *Siris* reveals a major change in his philosophical outlook.

My method will be to discuss certain aspects of the immortality question as they occur in the writings of three philosophers generally taken to have been major influences on Berkeley: Locke, Malebranche, and Bayle. With regard to Locke, I wish to discuss his controversy with Edward Stillingfleet, Bishop of Worcester, or at least that part of it concerned with the adequacy of the "way of ideas" to cope with the topic of a substantial self—a self which could reasonably be taken as potentially immortal. As for Malebranche, like many another philosopher in the Cartesian tradition, he attempts a "solution" to the problem of the soul's immortality. Perhaps even more than in Locke's case, Malebranche's "solution" will, I hope, make evident the extent to which major philosophical issues are bound up with what might

otherwise be written off as a historical curiosity. Having chosen these two discussions in order to mark out a historically appropriate philosophical framework within which to examine Berkeley's own views, I have added some comments by Pierre Bayle, from whom I believe Berkeley derived the clue to his own radical solution of the problem of the immortality of the soul. In the second part of the paper I examine several Berkeleian texts, and it is my hope that taking Berkeley seriously on the immortality issue will prove fruitful in understanding them. Far from immortality being forgotten after the statement of purpose in the preface, I hope to be able to show that the claim of *Principles of Human Knowledge* to have revealed man's soul as "naturally immortal" need no longer be taken as idle.

Berkeley wrote the *Principles* and *Three Dialogues* in an atmosphere in intellectual turmoil over, among other things, materialism, Pyrrhonism, Spinozism, and Newtonian physics. However, as John Wild has noted:

> There was another phase of the contemporary fermentation brought forth by the scientific philosophy which must also have influenced Berkeley during his student days. This was the Deist controversy. Newton's *Principia* had appeared in 1687, Locke's *Essay* in 1690, and Toland's *Christianity Not Mysterious* in 1696. The result was a wave of liberalism and so-called rationalism in religion which caused a veritable furore. Toland's treatise was burned by the hangman in Dublin, censured by the Irish Parliament, and denounced from every pulpit . . .[2]

Wild argues that Berkeley could not have altogether escaped the strife, but concludes from the lack of references to the issue that "one cannot read [Berkeley's] early works without realizing that he is throughout

[1]All references to Berkeley will be to the texts in *The Works of George Berkeley*, ed. by A. A. Luce and T. E. Jessop (9 vols.; London, 1948-57), hereafter abbreviated 'Works.'

(In the preparation of this paper I have benefitted considerably from discussions with Mr. Edwin B. Allaire of the State University of Iowa.)

[2]*George Berkeley* (Cambridge, Mass., 1936) p. 9.

[3]*Ibid.*, p. 10.

[4]*Ibid.* Cf. pp. 117 and 140 f.

[5]See, however, Jessop's review in *Mind*, XLVI (1937), 232-39.

[6]Cf. A. A. Luce, *Life of George Berkeley* (London, 1949), especially Chap. II.

[7]Peter Browne, *A letter in Answer to a Book Entitled, Christianity not Mysterious* . . . (London, 1697).

[8]See especially Luce's *editio diplomatica* (1944) of *Philosophical Commentaries.*

this period essentially a Deist." [3] Wild takes the principles of the "natural immortality of the soul" and the "existence and immateriality of God" [4] to be products of Berkeley's deistic proclivities and their proofs out of harmony with Berkeley's radical philosophic insights.

I am not interested in specifically questioning Wild's assertions,[5] but I shall try to show that Berkeley can plausibly be read as concerned wholeheartedly with these very principles. If being essentially a defender of immortality and immateriality makes Berkeley a deist, I fear that much ill-used label must be applied to many a hitherto orthodox theologian, including St. Augustine. But if Berkeley has failed to state outright his opposition to Toland and the deists in the *Philosophical Commentaries*, *New Theory of Vision*, *Principles*, or *Three Dialogues*, his arguments can nevertheless be read as attacks on that very "new way of thinking" which aroused Stillingfleet to arms against Locke.

Certainly we do know that Locke's own work had received early attention at Trinity College, Dublin—thanks to William Molyneux [6]—and that Toland's application of Locke's "way of ideas" to Christian doctrine resulted in an extended published controversy between Locke and Stillingfleet. The students of Locke at Trinity could hardly have avoided knowing something of the fight. Peter Browne, provost during Berkeley's student days, joined in the attack on Toland [7] and Locke; and as the earlier quotation from Wild shows, Toland succeeded in irritating more than a few of his fellow Irishmen. Furthermore, Luce [8] is correct, I think, in interpreting Entry 720 in the *Philosophical Commentaries* as opposing the views of Toland and others on rational religion. It is an especially interesting entry, coming as it does as part of a long series on Locke. One of that series reads: "We have assuredly an Idea of substance. It was absurd of Locke to think we had a name without a Meaning. This might prove acceptable to the Stillingfleetians" (*Philosophical Commentaries* 700). I think Luce is also correct in reading Entry 517 ("I take not away substances . . .") against the Stillingfleet background. And so while Toland's name is not mentioned, the issues in the controversy certainly are.

Now Stillingfleet had hit hard at both Locke and Toland on several counts, for he saw the "way of ideas" leading to disastrous conse-

quences in matters of religion. Among those consequences were the denial of substance, the possibility that matter might think, and the resultant danger to the existence as well as to our knowledge of a "thing" which might be immortal, and also the threat to the doctrine of the Trinity. Locke's protests that Toland's conclusions were not his business proved of no avail. Stillingfleet saw the threat to substance and a substantial self as implicit in the foundations of *An Essay towards a New Theory of Vision* and, indeed, often explicit in its structure. It remained for Toland merely to spell out the complete antiorthodox position. For Berkeley, I suggest this controversy between Locke and Stillingfleet became crucial. On the one hand he found certain elements in the *Essay* attractive; on the other he saw that the dangers of skepticism with respect to the self and in respect to substance in general must be avoided for precisely the reasons that Stillingfleet had given.

Stillingfleet wished to show Locke that if we start with the "way of ideas" we can never come to any "certainty of reason" about substance. He is not interested in Locke's *belief* in substance but rather in the intellectual bankruptcy revealed in Locke's appeal to substance as "something, I know not what," and his repeated example of the Indian and the tortoise. Not only is Stillingfleet unhappy with Locke's account of substance in Book II, Chapter 23 of the *Essay*, and in particular with the account of spiritual substance, but also with the related suggestions made in Book IV, Chapter 3, section 6.

Locke's attempt in his *First Letter* [9] to make his accounts of substance, spirits, and immateriality more acceptable to Stillingfleet is met alternatively with sarcasm and argument. As dissatisfied with Locke's restatements and revisions as with the *Essay* itself, Stillingfleet again argues that the "way of Certainty from Ideas" [10] simply fails to give us certainty on "one of the points of greatest importance, viz. that

[9]Edward Stillingfleet, Bishop of Worcester, initiated the correspondence in 1697 and his contributions were: *A Discourse in Vindication of the Doctrine of the Trinity; The Bishop of Worcester's Answer to Mr. Locke's Letter . . .;* and *The Bishop of Worcester's Answer to Mr. Locke's Second Letter.* Locke's three book-length letters were: *A Letter to the Bishop of Worcester; A Reply to the Bishop of Worcester's Answer to his Letter;* and *Mr. Locke's Reply to the Bishop of Worcester's Answer to his Second Letter.* Stillingfleet died in 1699.

[10]Stillingfleet, *The Bishop of Worcester's Answer to Mr. Locke's Letter* (London, 1697) pp. 49-50.

[11]*Ibid.*, pp. 54-5.

[12]Locke, *Letter to the Bishop of Worcester* in *Works of John Locke* (11th ed.; London, 1812) IV, 40.

there is a Spiritual Substance within us . . ." After suggesting that Locke's "way of Certainty from Ideas" may well be threatened by the assertion that the "Power of Thinking may belong to modified Matter," inasmuch as for him all Certainty must rest on simple ideas and one of the sources of these had originally been granted to be operations of the mind, Stillingfleet returns to the substance problem:

> I am of opinion, that the *great ends of Religion and Morality are best secured* by the Proofs of the *Immortality of the Soul* from its *Nature and Properties;* and which I think prove it *Immaterial.* I do not question whether God can give *Immortality* to a *Material Substance;* but I say it takes off very much from the evidence of Immortality, if it depend wholly upon God's giving that, which of its own Nature it is not capable of. For if the *Soul* be a *material Substance* it is really nothing but *Life;* or Matter put into Motion with such Organs and Parts as are necessary to hold them together; and when Death comes, then this *Material Substance* so modified is lost. God may by his Power grant a new Life; but will any man say, God can preserve the Life of a Man when he is dead? There is a plain Absurdity, and I think no such thing tends to *preserve Religion or Morality.*[11]

Now throughout the controversy, Stillingfleet was also concerned with faith and revelation, with the effect of Locke's doubts about substance upon a theologically respectable account of the Trinity, and with the question of certainty and evidence and how they were to be achieved by the "way of ideas." But Stillingfleet increasingly applied himself to Locke's discussions of spiritual substance and the immateriality and immortality of the soul.

However, when Berkeley commented in *Philosophical Commentaries* 517 "I take not away substances . . ." I think he meant what he said. In the Locke-Stillingfleet controversy, he was siding with orthodoxy —with Stillingfleet. As a philosopher he felt more strongly than Stillingfleet did Locke's often plaintive refrain: "If your lordship, or anybody else, will show me a better way to a certainty [with respect to spiritual substance, and so on] I am ready to learn, and will lay by that of ideas." [12] The "way of ideas" seemed to be the only "way," and so

far he sided with Locke—but as a priest he was dismayed to see philosophers start with ideas and end in doubting or denying basic Christian teachings [13] such as the immortality and immateriality of the soul and the doctrine of the Trinity. As it eventually turned out, Berkeley, too, began with ideas; but unlike Locke, he found that this led to the immateriality and immortality of the soul.

Thus far, however, I have sought simply to call attention (*a*) to the important position Locke's account of spiritual substance had in the Locke-Stillingfleet controversy, (*b*) to the acknowledged intimate connection between that account and the question of the soul's immortality, and (*c*) to Berkeley's own awareness of the controversy as revealed in several passages in his *Philosophical Commentaries*.

The second figure in this exposition is Malebranche. In recent years there has been an increasing tendency to rank his influence on Berkeley as at least the equal of Locke's, Pierre Bayle being a third major influence. Quite apart from the fact that his contemporaries linked him with Malebranche [14] (not always for lofty philosophical reasons), Berkeley could take comfort in the Augustinian atmosphere of Malebranchianism and the nonsecular philosophy that developed within it. Furthermore, Malebranche was an antimaterialist and one who, like Descartes, sought to defend the integrity of spiritual substances.

Descartes himself had, as he makes clear in the Synopsis to the *Meditations*, sought to distinguish soul from body in such a way that the immateriality of the former would be untainted and thus the sort of "thing" which *could* be immortal. Immateriality and immortality were issues of some consequence in the seventeenth century, as a casual glance at the literature of, for example, the souls of beasts will show. My reason for choosing to discuss Malebranche, when many others wrote on immortality, is that quite apart from the fact that Berkeley

[13]He was not alone. For some indication of the scope and importance of the Stillingfleet controversy, see John W. Yolton, *John Locke and the Way of Ideas* (Oxford, 1956), especially Chap. IV.

[14]*Mémoires de Trévous*, May 1713, p. 921.

[15]Richard H. Popkin, "The New Realism of Bishop Berkeley," *University of California Publications in Philosophy*, XXIX (1957), 1-19.

[16]See, for example, Anita D. Fritz, "Berkeley's Self—Its Origin in Malebranche," *Journal of the History of Ideas*, XV (1954), especially 568 f; and Denis Grey, "Berkeley on Other Selves: A Study in Fugue," *Philosophical Quarterly*, IV (1954), 44.

[17]". . . nous ne la connaissons que par *conscience* . . ." (Malebranche, *De la recherche de la vérité*, ed. Geneviève Lewis [Paris, 1945], I, 257). Subsequent references are to the text in this edition.

was familiar with him, an examination of Malebranche allows us to appreciate some of the critical problems a philosopher had in defending immortality within a context that in several important ways was Cartesian.

Malebranche, however, proved not to be a voluntarist in the same sense that Descartes had been. He never proposed the demon hypothesis, and he held that the entities of mathematics were coeternal with God. As for getting outside our ideas to bodies, Malebranche argued that we do not know bodies in themselves. He went so far as to assert that the existence of matter is known only through revelation. What we do know are Ideas. Arnauld, in his objections to Descartes's *Meditations*, had alluded to a difficulty capable of generating an insoluble skepticism, for if there were one set of truths for us and still another for God, how would one ever bridge the gap? Malebranche grasped the nettle. He proposed direct realism with respect to these Divine Ideas. Admittedly this left him with a problem of error, but Augustinianism offers some theological possibilities in this direction.

Malebranche's direct realism relative to the Ideas, his "seeing all things in God," may well have been seized upon by Berkeley, as Popkin [15] has suggested, with the Ideas converted into empirical ideas-of-sense rather than considered Platonically. Furthermore, Berkeley seems, at least on occasions, to have found the step from ideas to God as direct as it was for Malebranche (and St. Augustine); and like Malebranche, he did not treat ideas as mental. And while Berkeley sought to distinguish his own account of our physical actions from Malebranche's ("We move our Legs our selves. 'tis we that will their movement. Herein I differ from Malebranche" [*Philosophical Commentaries* 548]), it is by no means clear that his theory of perception, his "sensory occasionalism," will permit this.[16] Malebranche also held that we have no Idea of the self; [17] for if we "saw" the Idea in God, then we would be able to deduce all its properties. But while Berkeley might have been happy with the claim that we do not have an idea of the self, even granted their different uses of "idea," Malebranche's proof of the immortality of the soul was hardly calculated to satisfy Berkeley—if, as I have suggested, he was seriously concerned with the soul and its immortality.

Of immortality, Malebranche commented, reminiscent of Descartes:

> . . . the distinction of body and soul is the basis of the main tenets of philosophy, and among others of the immortality of the soul. For, let me say this in passing, if the soul is a substance distinguished from the body, it is clear that, even if death were to annihilate our body (which it does not do), it would not follow from that that our soul was also annihilated.[18]

The distinction, however, is not so sharply made but that its adequacy might not be questioned. For ". . . it is only indirectly and by the clear idea that you have of your body, that you realize that your soul is neither material nor mortal." [19] The indirect proof upon which the distinction rests seems to amount to this: While we never know material things in themselves, we do "see," that is, conceive "in God" the Idea of the material world, its essence—which Malebranche calls *intelligible extension.* By exploring this Idea, we "see" clearly and distinctly that everything that could be said about matter can be reduced to geometrical properties; that is, that all possible modifications of matter are comprehended in its essence—extension. This, however, leaves certain things still not talked about; for example, pleasure, sensation, and so on. But these cannot pertain to material substance—since we know the essence of that, extension, and these are not reducible to it. These modes of being must, however, subsist in some substance—and that substance is presumably spirit.

[18]Malebranche, *Dialogues on Metaphysics and on Religion*, trans. M. Ginsberg (London, 1923), p. 74. See also *Recherche*, III, 88 f. (Ecl. X).

[19]*Méditations chrétiennes*, ed. Henri Gouhier (Paris, 1928), p. 184 (Med. IX, section 22).

[20]See, for example, Malebranche, *Correspondance avec J.-J. Dortous de Mairan*, ed. Joseph Moreau (Paris, 1947).

[21]Thanks in no small measure to the violently anti-Malebranchian Père Tournemine and the other Jesuits involved with the *Mémoires de Trévous.* See Chapters I and II in my *Early Reception of Berkeley's Immaterialism: 1710-1733* (The Hague: Martinus Nijhoff, 1959). See also Alfred R. Desautels, S.J., *Les Mémoires de Trévous et le mouvement des idées au* XVIII^e *siècle, 1701-1734* (Rome: Institutum Historicum S. I., 1956).

[22]See especially *Recherche*, I, 234 *ad fin.* and III, 74 f. Also, Henri Gouhier, *La philosophie de Malebranche* . . . (2d ed.; Paris, 1948), especially Part III.

[23]In this connection see Gustav Bergmann, "Some Remarks on the Philosophy of Malebranche," *Review of Metaphysics*, X (1956), 212 f, reprinted in G. Bergmann, *Meaning and Existence* (Madison: Univ. of Wisconsin Press, 1959).

[24]*Recherche*, II, 182-83. See also, for example, pp. 159, 184, and 238 f; and in Vol. I, pp. 230 f, and 252 f. See also Gouhier, *Philosophie de Malebranche*, pp. 306 ff.

The essential feature of this proof is Intelligible Extension, but unfortunately, the notion was found to be unclear in Malebranche. Critics charged him with Spinozism, with making extension an attribute of God and creation impossible. He thought the charge was the result of a gross misinterpretation of his position, and until the end of his life tried to state and restate his arguments so that critics would cease to misunderstand them.[20] Misunderstanding (assuming that is what it was) prevailed—and eventually caught up Berkeley himself.[21]

Very crudely and briefly, Malebranche seems to have meant by Intelligible Extension the archetype of all possible worlds.[22] We do not *know* that material things exist and indeed are aware of their existence only from the report of the creation revealed to us in Scripture. What we do know is the essence of bodies, the Ideas, and not the bodies themselves, for whether bodies exist is dependent not on the Ideas but on the action of God's will. That which we know of bodies is *intelligible extension*, for this "represents" material things in the sense of *making them known*. To "see" is to know the mathematical formula for the construction of the thing; it is *not* to "see" the body-in-itself. In effect, all that is to be known of bodies pertains to their essence (extension) and not to their existence, and to know their extension is to grasp them geometrically. Intelligible Extension seems to be something like the axioms and theorems of arithmetic and geometry taken as deducible from one axiom. "All things" are thus "in" Intelligible Extension in that the mathematical rules for constructing all possible bodies are contained in it as theorems are contained in axioms.[23] Thus we "see all things in God"—but with spirits excepted, as already noted; for to "see" the Idea of spiritual substance would mean that we would know the spiritual axioms, as it were.

As becomes clear when Malebranche seeks to show the extent to which his account may possibly differ from St. Augustine's, Malebranche maintains that, strictly speaking, the eternal truths are not the Ideas. The eternal truths that we "see" are eternal and real relations holding either between the Ideas or between other relations. "Truth is nothing other than a real relation, either of equality or inequality . . . Truths are therefore only relations, and the knowledge of truths the knowledge of relations." [24] It is, then, by the activity of our pure spirit

in making comparisons among the Ideas and thereby discovering the eternal relations, that we may be said to learn the eternal truths. Thus the numbers that you "see" or the geometrical formulae that you "see" are the same as those that I "see"; indeed they are the same as God "sees," although admittedly He does not need to go to the trouble of deriving them since He "sees" them, as it were, "in" the axiom. Furthermore, if a circle is drawn on a blackboard, the sensations are presumably merely modifications of a spiritual substance and wholly unextended, whereas the circle we "see" is not the one of chalk but rather the geometrical rule for constructing a circle. As for the wondrous (and unknown) laws which express the relations between mind and body, these of course constitute Malebranche's occasionalism; and while we may learn them empirically in a Humean way, they are never eternal truths or objects of demonstration.

The axiom metaphor may not prove ultimately satisfactory in trying to get at Malebranche's notion of *intelligible extension*, but it has the advantage of bringing out his point that an Idea is no more extended than a theorem in Euclid; and it also throws some light on the sense in which "all things" might be thought to be in God. But this Idea, this Intelligible Extension which represents bodies, Arnauld found anything but intelligible.

> Honestly, I cannot fathom what he wanted us to understand by this *infinite intelligible extension*, in which he now claims we see all things; for he says things so contradictory, that it seems to me as difficult to form a distinct notion about what he says as to conceive of a mountain without a valley. It is a created thing, it is not a created thing. It is God, and it is not God. It is divisible and it is not divisible. It is not only eminently in God, but it is formally; and it is only eminently and not formally.[25]

Arnauld was extremely concerned with Malebranche's claim that

[25]*Des vraies et des fausses idées*, Chap. XIV in *Œuvres philosophiques de Antoine Arnaud*, ed. Jules Simon (Paris, 1843), p. 120.

[26]*Ibid.*, Chap. XIV (p. 116).

[27]*Ibid.*, Chap XIX (p. 164).

[28]*Ibid.*, Chap. XII (p. 102).

[29]Cf. *ibid.*, Chap. XVIII f.

[30]*Réponse du Père Malebranche au livre des vraies et des fausses idées*, Chap. V, section ix in Arnauld, *Œuvres philosophiques*, p. 311.

[31]" 'Representative Ideas' in Malebranche and Arnauld," *Mind*, XXXII (1923), 449-61.

[32]*Méditations chrétiennes*, No. IX.

[33]Cf. *Réponse du P. Malebranche*, Chap. VI in Arnauld, *Œuvres philosophiques*, p. 313.

we see all things in God. On the one hand, Malebranche seemed to be saying that "God comprehends in himself millions of intelligible gnats and fleas; for he knows them, since he made them";[26] or again, ". . . women, who are idolators of their beauty, see God in looking in their mirror, because the face that they see is not their own, but an *intelligible face*, which resembles it and which makes up a portion of that *infinite intelligible extension* that God comprehends."[27] On the other hand, "there is a great curtailing of the scope of the therm 'all things,' "[28] since all we seem to see are material things and numbers and not even our souls. Arnauld took the view that Malebranche's unintelligible venture into Intelligible Extension and his claim that "we see all things in God" were both based on the doctrine of representative ideas.[29] This doctrine in turn arose from a thoroughly confused and faulty account of perception. Arnauld maintained that the *êtres représentatifs* of Malebranche were totally superfluous, since our ideas taken as perceptions were already representative.

Malebranche, for his part, tried to show that the key to Arnauld's "misunderstanding" was an alleged failure to appreciate the difference between ". . . the *perceptions* of the soul, as modalities of its substance, and the *ideas of the objects;* [Arnauld] takes the *perception* and the idea as the same thing . . ."[30] As Lovejoy has put it: ". . . there are no 'representative mental entities' in Malebranche's account of perception. The factors in perception which for him are 'representative' are never 'mental' and those which are 'mental' are never 'representative.' "[31]

As Arnauld saw it, Malebranche, having been misled into postulating the *êtres représentatifs*, proceeded to try to find a home for them "in God." But not only did Malebranche thereby place all sorts of unworthy things in God; his attempt to state this in terms of Intelligible Extension seemed to suggest that creation was impossible. In fact, Malebranche had tried to forestall the charges of Spinozism by distinguishing sharply between Intelligible Extension and material extension,[32] but the analysis only served to convince Arnauld that the distinction could not be maintained.

Malebranche attempted to prove that Arnauld simply didn't understand the difference between *connaître* and *sentir*,[33] but Malebranche's immaterialism and—what is, I suggest, more important—his account

of immortality had to stand or fall with the intelligibility of Intelligible Extension. As ideal as Malebranche sought to make this Idea, it became besmirched with the corporeal, thereby tainting the soul and even God Himself; and, unfortunately, the Oratorian was forced to spend the balance of his life in a fruitless attempt to extricate himself from charges of Spinozism. Rightly or wrongly, even so brilliant a metaphysician as Malebranche was interpreted as failing in his idealization of extension.

Descartes and Malebranche had both "failed" in their attempts to construct an ontology in which the immateriality of the soul could be demonstrated, thereby making arguments for its immortality more, as Stillingfleet put it, "reasonable." Berkeley seems to have attributed this "failure" to problems arising from extension. His sensitivity to the broader theological issues raised by extension was revealed in his *Philosophical Commentaries:*

> The great danger of making extension exist without the mind. in y^{t} if it does it must be acknowleg'd infinite immutable eternal etc. w^{ch} will be to make either God extended (w^{ch} I think dangerous) or an eternal, immutable, infinite, increate being beside God [Entry 290].

But while Berkeley was clearly unhappy both with the contempt Malebranche often expressed for sensible "knowledge," as well as with his account of extension, Berkeley also borrowed a good deal as well. Accordingly, his protest to Percival over being classed with Malebranche ("Fine spun metaphysics are what I on all occasions declare against" [*Works* VIII, 41]), must be taken with a grain of salt. For Berkeley proceeded to produce an ingenious coupling of Malebranche and Locke, wherein the spectre of extension was banished, a substantial and immaterial self restored, skepticism refuted, and common sense vindicated. The first task was to eliminate extension from Male-

[34]The review actually spans two issues of *Nouvelles de la republique des lettres,* October and November 1699, pp. 363-85; 483-513.

[35]Le Clerc, *Parrhasiana,* ou *pensées diverses* (Amsterdam, 1699), especially pp. 386-92. Cf. Locke's *Second Letter* in his *Works* (11th ed.; London, 1812), IV, 474-77.

[36]*Works,* IV, 476.

[37]He also cites "Rorarius" G. Locke is discussed in K. In this connection, see *Pierre Bayle: Le philosophe de Rotterdam,* ed. Paul Dibon (Amsterdam: Elsevier, 1959), especially articles by P. J. S. Whitmore and C. L. Thijssen-Schoute.

branchianism and the clue to this Berkeley may well have gotten from Bayle.

But before turning to that, it is worth noting that Bayle himself was interested in the problem of the immateriality and immortality of the soul. It is dicussed in several *Dictionnaire* articles; and in more than one, reference is made to the Locke-Stillingfleet controversy. Thus in "Dicearque," Remark M, one finds an extended discussion of that aspect of the controversy concerned with whether matter can think and with the nature of substance in general and spiritual substance in particular. The cited sources of Bayle's information are (*a*) an article in *Nouvelles de la république des lettres*, for November, 1699, and (*b*) Jean Le Clerc's *Parrhasiana*.

The first item reviews the third exchange between Locke and Stillingfleet—with particular emphasis on the questions of whether matter can think, the soul's immortality, and Locke on substance.[34] The reference to *Parrhasiana* turns out to be a citation [35] from Locke's *Second Reply* where Locke attempts to meet the charge of "lessening the credibility of these articles of faith [immortality of the soul and the resurrection]" by arguing:

> any one's not being able to demonstrate the soul to be immaterial takes off not very much, nor at all of the evidence of its immortality, if God has revealed that it shall be immortal, because the veracity of God is a demonstration of the truth of what he has revealed, and the want of another demonstration of a proposition that is demonstratively true, takes not off from the evidence of it.[36]

Most of this citation is to be found in article "Perrot," Remark L, and the items are cross-referenced. Bayle cites "Perrot" in his *Réponse aux questions d'un provincial* [37] (1704-7) Part III, Chapter XV, where he presents an interesting criticism of Locke on substances and their accidents. He suggests that inasmuch as Locke holds that extension is not the essence of material substance, it is only an accident—a view which agrees with the Roman Catholics who must defend transubstantiation. But Bayle then goes on to comment: "In a word, this doctrine of Mr. Locke's leads us directly to grant only one kind of substance, which by one of its attributes is joined with extension, and

by the other with thought; once this has been granted, no longer can one conclude that if a substance thinks, it is immaterial," [38] Bayle concludes the section with a mention of Spinoza and his doctrine that thought and extension are attributes of the same substance. The entire discussion greatly aroused Locke's friend, Jean Le Clerc, who, in an extended review of the fifth edition of the *Essay*,[39] offered a bitter rejoinder. "I do not know what *Spinoza* held, but I see clearly that what Mr. Bayle says here is only for the purpose of smearing Mr. Locke, after having commended him for the sake of an appearance of equity, and finally, to make him suspect of Spinozism" (p. 119). Locke, however, was more explicitly accused of Spinozism by, for instance, William Carroll; and Berkeley himself seems not to have been unaware of the possibility, to judge by *Philosophical Commentaries*, 825: "Hobbs & Spinoza make God Extended. Locke also seems to do the same."

Bayle again cites the remarks from "Dicearque" and "Perrot" in "Pomponace," Remark F, where, as in "Perrot," Remark L, Bayle is up to his old game of playing the truths of faith off against those of reason. But in "Dicearque," Bayle seems pleased to have Locke make an appeal to revelation; but he also notes that Stillingfleet became a defender of Philosophical Orthodoxy by his defense of the thesis that matter is incapable of thought and that with respect to Philosophical (as distinguished from Theological) Orthodoxy, Stillingfleet had the better of Locke. Bayle even suggests an argument against Locke that he failed to find in his sources: "It has always seemed to me most proper to show the impossibility of combining in the same subject both the three dimensions and thought."

The nature of extension and its relations to our minds and to God were recurring themes in Bayle. In "Zeno" [40] (and in "Pyrrho"), Bayle is seen pressing the argument from perceptual variations, which had been used by philosophers to make the secondary qualities mind-

[38] *Œuvres diverses* (La Haye, 1727), III, 942.

[39] In *Bibliothèque choisie*, XII (1707), especially 105-123. For Berkeley's own interest in Le Clerc and his important journals, see *Works* IX, 16. Le Clerc's estimation of Stillingfleet ("Cet illustre Prélat avoit consumé sa vie principalement à étudier les Antiquitez Ecclesiastiques, & à lire une infinité de Livres; mais il n'avoit que très peu de connoissance de la Philosophie . . .") appears in his *Éloge* for Locke, *Bibliothèque choisie*, VI (1705), 342-411.

[40] Locke is cited in "Zeno", I.

[41] Cf. Richard H. Popkin, "L'abbé Foucher et le problème des qualités premières," XVII[e] *Siècle*, December 1956, pp. 633-47.

[42] *Recherche*, II, 310.

[43] Cf. "Berkeley and Pyrrhonism," *Review of Metaphysics*, V (1951), 223-46.

dependent, against the primary qualities as well. This, I suggest, was Berkeley's clue to a solution of the problem of the immateriality and immortality of the soul. Bayle himself got the suggestion from the Abbé Simon Foucher's [41] attack on Malebranche's representative ideas. By taking these Ideas as modifications of the soul (and thus "in" us) and as representative in the sense of "like" perceived things, Foucher was able to get his objections off the ground, prompting Malebranche to comment: "When one criticizes a Book, it seems to me one ought at least to have read it." [42] Bayle generalized the attack on Malebranche by urging the argument against any dogmatist who had a "real" world of primary qualities.

But where Bayle paused to glory in one more skeptical gambit, Berkeley pressed on to his New Principle. That he did so, indebted to Bayle, is mentioned by Jessop in a note to the text of *Principles of Human Knowledge*, 9 (*Works* II); and Berkeley's use of Bayle's skeptical arguments to overthrow skepticism has been discussed at length by Popkin.[43] Berkeley held that skepticism followed from accepting a dichotomy between the *esse* and *percipi* of things. He used Bayle's argument to collapse the distinction and asserted the reality of the sensible world. But if I am correct, Berkeley also saw that so long as the traditional mind-matter distinction was maintained, arguments in favor of the sort of "thing" which might be thought potentially immortal seemed ultimately to be threatened. Locke, for example, had not only been in some doubt over "real" as opposed to sensible objects; he had in the end been so unsure about spirits that he admitted the possibility that matter might think. But immaterialism had more to fear than Lockean matter, for Spinoza had made the Cartesians keenly aware of the dangers inherent in extension.

Even Malebranche, with the most pious intentions, with a grasp of the dangers, and with considerable metaphysical genius, found that refinements and sophistications were not an adequate popular defense against attacks on the entire mind-matter distinction. A radical solution was called for, and Bayle's skeptical argument suggested it. Extension could be banished from the scene by treating it as a sensation.

This radical solution not only afforded Berkeley an opportunity to root out the source of the trouble in Malebranchianism; it also allowed him to have the best in Locke, the common-sense empiricism which

had had such an impact on the Republic of Letters, *without* paying the horrendous price of suggesting that matter might think and that substance was virtually unknowable. Having dissolved even the primary qualities into sensations and noting "that neither our thoughts, nor passions, nor ideas formed by the imagination, exist without the mind, is what every body will allow" (*Principles of Human Knowledge*, § 3), Berkeley reinstates spiritual substance definitively in *Principles of Human Knowledge*, § 26 and § 27. He makes it clear not only that he accepts the view that ideas must be ontologically dependent on a substance but that ideas could *not* inhere in an entity (for example, material substance) which by definition is inert. An inactive substance is unintelligible to Berkeley; and it is basically unintelligible to the defenders of material substance as well, since they often find themselves holding that matter is inert and yet, through its dispositional properties, causally efficacious. And if they hold strictly to the latter view, Berkeley notes: "Matter once allow'd. I defy any man to prove that God is not matter" (*Philosophical Commentaries* 625). Finally, ideas could not themselves be substances, for, as he was at great pains to point out, they have no causal properties (see *Principles of Human Knowledge*, § 25); they are totally inert, nor can they be independent of spirit. And Berkeley repeatedly argues that we should not expect to have an idea of a spirit, for we cannot know that which is active by means of that which is passive.

Thus in the end, we have only spirits, their acts, and the objects of those acts—ideas. Have we, however, succeeded in banishing extension by taking Bayle's hint and making it a sensation?

> . . . it may perhaps be objected, that if extension and figure exist only in the mind, it follows that the mind is extended and figured; since extension is a mode or attribute, which (to speak with the Schools) is predicated of the subject in which it exists. I answer, those qualities are in the mind only as they are perceived by it, that is, not by way of *mode* or *attribute*, but only by way of *idea*; and it no more follows, that the soul or mind is extended because extension exists in it alone, than it does that it is red or blue, because those colours are on all hands acknowledged to exist in it, and no where else (*Principles of Human Knowledge*, § 49).

This answer reveals, I think, Berkeley's delight in having eliminated the threat of extension; and he need only appeal to what is "on all hands acknowledged" finally to dispose of the problem. Actually, he had expressed his pleasure earlier, as in *Philosophical Commentaries*, 391:

> The Philosophers lose their Matter, the Mathematicians loose their insensible sensations, the Profance their extended Deity Pray w^{t} do the Rest of Mankind lose, as for bodies &c we have them still. N.B. the future Philosoph: & Mathem: get vastly by y^{e} bargain.

Berkeley had purged his universe of extension and he had revealed a spiritual substance. Far from sympathizing with Toland and the deists, far from tossing in comments on the immortality of the soul as a sop to tradition, his whole argument can be seen as an attempt to rescue Christian orthodoxy from deism. What Berkeley attempted to do was to show that the soul was the sort of "thing" which would make a credible candidate for immortality. He was not attempting a rational proof of God's grace or a demonstration of an article of faith. Stillingfleet had argued that the "way of ideas" induced such doubts over the nature of the soul as to make the notion of a soul virtually unintelligible. Locke had tried to counter that God could make anything He chose immortal and that in any case revelation sufficed for faith. But as Stillingfleet maintained repeatedly, belief in an article of faith was made more difficult when one of the items in the article to be believed was itself a "something I know not what."

> And for the *Soul* [one] cannot be certain, *but that Matter may think*, (as you affirm) and then what becomes of the Soul's Immateriality (and consequently Immortality) from its Operations? But for all this, say you, *his Assurance of Faith remains firm on its own Basis*. Now I appeal to any Man of Sense, whether the finding the Uncertainty of his own Principles which he went upon in Point of Reason, doth not weaken the Credibility of these fundamental Articles when they are consider'd purely as *Matters of Faith*? For before, there was a natural Credibility in them on Account of Reason; but by going on wrong Grounds

> of Certainty, [i.e. Locke's 'way of ideas'] all that is lost; and instead of being certain he is more doubtfull than ever . . .[44]

When Berkeley set about trying to prove that the soul was immortal he was trying to repair the damage Stillingfleet indicated Locke had done. For an article of faith is clearly threatened when a philosophical theory tells us that one knows so little about souls as to admit they might be material. Berkeley attempted to prove both that "soul" was a meaningful term and that souls were purely immaterial. In so doing, he was not echoing the deism of Toland and others but was standing squarely in the orthodox Christian tradition. Other philosophers and theologians had tried; Descartes and Malebranche had both tried and failed. Having gotten rid of extension, Berkeley thought he had succeeded in giving an account of the soul which would fulfill the basic requirements of orthodoxy. That he thought his contribution on the topic important is indicated in his first letter to Percival in reply to the latter's report of the reception of the *Principles* among the London wits. At the end of his opening paragraph, Berkeley writes:

> If, therefore, it shall at any time lie in your way to discourse with your friends on the subject of my book, I entreat you not to take notice to them I deny the being of matter in it, but only that it is a treatise of the *Principles of Human Knowledge* designed to promote true knowledge and religion, particularly in opposition to those philosophers who vent dangerous notions with regard to the existence of God and the natural immortality of the soul, both which I have endeavoured to demonstrate in a way not hitherto made use of [*Works* VIII, 36].

[*To be continued*]

[44]*The Bishop of Worcester's Answerto Mr. Locke's Second Letter*, pp. 28-9.

Tad W. Guzie, S.J.

EVOLUTION OF PHILOSOPHICAL METHOD IN THE WRITINGS OF ST. THOMAS

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Various studies of the writings of St. Thomas Aquinas have revealed that the Angelic Doctor had a highly elaborated view of scientific method and a rigorous criterion of philosophical meaning. Summarily stated, the full commitment of the intellect to a scientific conclusion involves seeing that conclusion in the light both of the rational principles leading to the conclusion and of the basic evidence of experience from which the conclusion is obtained. The establishment of a philosophical conclusion consequently entails a resolution of the higher-order proposition to a twofold principle or source—the first organizing principles of the science in question, and the experiential evidence or data of sense experience upon which the validity of the conclusion and of the first logical principles themselves ultimately rests.

The philosophical reasoning process thus consists of two stages—the way of discovery or inquiry, involving a gathering and analysis of experiential evidence; and the way of judgmental exposition, the demonstrative and organized moment of scientific reasoning. It is significant to note that, in Aquinas's view, neither of these stages is complete without the other. A philosophically descriptive analysis of experience naturally gives way to judgmental organization, in which the intellect becomes committed to the intelligible necessity of what the analysis reveals; while, conversely, demonstrative exposition is meaningful and scientifically valid only after a careful consideration of the pertinent concrete evidence.[1]

The *via inventionis* or stage of inquiry does yield true knowledge, and a judgment made in the course of experiential reflection will entail a true intellectual commitment to some real necessity. An existential judgment, for example, is as necessary as some higher-order philosophical conclusion, for a thing cannot simultaneously exist and not exist in the same respect. However, within the framework of a larger philosophical inquiry, judgments made in the way of discovery are ordered to judgments of a more universal character. Since in the present study we shall be considering the way of inquiry in relation to the stage of organized demonstration which completes the entire analysis, the term *judgmental* has been reserved for referring to the *via iudicii*. Hence, for our purposes, a "judgmental statement" will always mean a more universal philosophical proposition, one which is founded upon, and thus presumes true and necessary, judgments of a lower order made in the stage of inquiry.

Though St. Thomas's *teaching* on the matter of philosophical method can be found throughout his works, his personal *use* of the method poses another problem. Aquinas presents his teachings in judgmentally organized form, often giving only the briefest indications of the pertinent experiential evidence. Thus, while we find him giving a detailed picture of his philosophical positions according to the way of demonstrative exposition, we do not often discover him detailing concrete evidence according to the way of discovery. His writings might be compared to many textbooks of experimental science of our own day; current theories are thoroughly presented in judgmental fashion, but the author rarely elaborates the many detailed experiments on the basis of which the theory was actually established. Thorough analysis of the evidence of experience—in St. Thomas's mind a necessary procedure and one actually prior to judgmental exposition—must for the most part have been left to the individual teacher, much as the

[1]For the textual bases of these very summary remarks, see Louis-Marie Régis, O.P., "Analyse et synthèse dans l'œuvre de s. Thomas," *Studia Mediaevalia* (Bruges: De Tempel, 1948), pp. 303-30; and J. Peghaire, C.S.Sp., *'Intellectus' et 'ratio' selon s. Thomas d'Aquin* ("Publications de l'Institut d'Etudes Médiévales d'Ottawa," VI [1936], esp. pp. 100-280). See also Patrick J. Burns, S.J., "St. Thomas and Judgment: Selected Texts" (unpublished master's thesis, Dept. of Philosophy, St. Louis University, 1957), pp. 66-94.

[2]The dates given throughout are those of M. Grabmann as cited by V. J. Bourke in his introduction to the American reprint of the Parma edition of the *Opera Omnia* (I, xii-xiii).

physics textbook leaves most questions of concrete experimentation to the student's laboratory work.

However, while the same philosophical question will often be treated according to the way of judgment in several of Aquinas's works with no apparent *doctrinal* evolution, there is no reason for assuming that St. Thomas's view of the *method* proper to a strictly philosophical quest did not undergo a gradual development. In fact, considering how St. Thomas for the first time in the history of Christian thought detached from a strictly theological context various issues that could be handled at the level of natural reason, one might be led to suspect that his method of approaching philosophical problems would undergo some revision in the course of this detachment, even though his basic teaching on the matter itself remained unchanged.

The purpose of the present study will be to explore various facets of the evolution of philosophical method in St. Thomas's own thinking, his personal *use* of the scientific procedure which we find *described* even in his earliest works. Two examples have been chosen to illustrate this methodological development. The first set of texts will be used largely to point out the meaning of an "evolution in method." The second series of illustrative texts will be developed in greater detail and will exemplify the doctrinal effects of St. Thomas's shift in procedure.

Example 1: Development of Method

A clear-cut instance of methodological evolution can be seen in St. Thomas's discussions of whether the intellect can understand many things at one time. Taking up this question in the *De Veritate* (1256-59) [2] in terms of the angelic intellect, he goes through a lengthy and detailed *formal* analysis. Having discussed how forms in general are related to their subjects, how one potency cannot be simultaneously determined by different acts of the same order, and how forms belonging to one genus can variously exist in a subject, Aquinas finally proceeds to apply this analysis specifically to intelligible forms: the

intellect can be perfectly in act with respect to only one *species* at a time. An application is then made to the angelic intellect.[3]

This elaborate analysis may be compared with that found in the

[3]"Respondeo. Dicendum, quod intellectus, omne quod intelligit, intelligit per aliquam formam; et ideo ex formis intellectus, quibus intelligit, oportet considerari, an simul angelus possit multa intelligere.

"1) Sciendum est igitur, quod formarum *quaedam* sunt unius generis; *quaedam* autem generum diversorum.

"Formae quidem quae sunt diversorum generum, diversas potentias respiciunt; cum unitas generis ex unitate materiae sive potentiae procedat secundum Philosophum. Unde impossibile est unum subiectum simul perfici diversis formis diversorum generum: quia tunc una potentia non determinabitur ad diversos actus, sed diversae [Parma: diverse]; sicut si aliquod corpus est simul album et dulce, albedo inest ei secundum quod participat de natura diaphani, dulcedo autem secundum naturam humidi.

"Formae vero quae sunt unius generis, unam potentiam respiciunt; sive sint contrariae, ut albedo et nigredo; sive non, ut triangulus et quadratum. Hae igitur formae in subiecto *tripliciter* esse dicuntur.

"*Uno modo* in potentia tantum; et sic sunt simul, quia una potentia est contrariorum, et diversarum formarum unius generis.

"*Alio modo* secundum quod sunt in actu imperfecto, ut cum sunt in fieri; et sic etiam simul esse possunt, ut patet cum aliquis dealbatur: tunc enim toto dealbationis tempore albedo inest ut in fieri, nigredo vero ut in corrumpi.

"*Tertio modo* ut in actu perfecto, ut cum iam albedo est in termino dealbationis; et sic impossibile est duas formas unius generis esse simul in eodem subiecto. Oportet enim eamdem potentiam ad diversos actus terminari: quod est impossibile, sicut et unam lineam ex una parte terminari ad diversa puncta.

"2) Sciendum est igitur, quod omnes formae intelligibiles sunt unius generis, quantumcumque res quarum sunt, sint generum diversorum. Omnes enim eamdem potentiam intellectivam respiciunt. Et ideo in potentia omnes simul esse possunt in intellectu, et similiter in actu incompleto, qui est medius inter potentiam et actum perfectum. Et hoc est species esse in habitu, qui est medius inter potentiam et operationem; sed in actu perfecto plurium specierum intellectus simul esse non potest.

"Ad hoc autem quod actu intelligat, oportet quod sit in actu perfecto illius speciei secundum quam intelligit; et ideo impossibile est quod simul et semel secundum diversas formas actu intelligat. Omnia igitur diversa quae diversis formis intelligit, non potest simul intelligere; illa vero quae intelligit per eamdem formam, simul intelligit.

"Unde omnia quae intelligit per unam Verbi essentiam, simul intelligit; ea vero quae intelligit per formas innatas, quae sunt multae, non simul intelligit, si diversis formis intelligat. Quilibet enim angelus per eamdem formam multa intelligit, ad minus omnia singularia unius speciei per unam speciei formam. Superiores vero angeli plura possunt una specie intelligere quam inferiores: unde magis possunt simul multa intelligere.

"3) Sciendum tamen, quod aliquid est *unum* quodammodo, et alio modo *multa*; sicut continuum est unum in actu et multa in potentia. Et in huiusmodi si intellectus, vel sensus feratur ut est unum, simul videtur; si autem ut est multa, quod est considerare unamquamque partem secundum se, non sic potest totum simul videri.

"Et sic etiam intellectus quando considerat propositionem, considerat multa ut unum; et ideo inquantum sunt unum, simul intelliguntur, dum intelligitur una propositio quae ex eis constat; sed inquantum sunt multa, non possunt simul intelligi, ut scilicet intellectus simul convertat se ad rationes singulorum secundum se intuendas. Unde Philosophus dicit in VI *Metaph.*: *Dico autem simul et separatim intelligere affirmationem et negationem, quasi non*

First Part of the *Summa Theologiae* (1266), where St. Thomas approaches the same problem by way of an analysis of cognitive *experience.*

> Just as unity of term is required for unity of movement, so unity of object is required for unity of operation.
>
> Now it is possible that several things be taken either as several or as one, like the parts of a continuous whole. If any part is considered in itself, the parts are *many* and hence are not grasped in one operation, nor all at once through sense and intellect. But in another way, the parts are taken as forming *one whole,* and thus they are known together in one operation, through both sense and intellect. This holds true as long as the entire continuous whole is considered, as is stated in III *De Anima.*[4] It is in this way that our intellect understands a subject and predicate together, as being parts of one proposition; and also two things being compared, according to their agreement in one point of comparison.

Thus, by reflection on cognitive experience, we find that many things can indeed be understood "together," as long as the intellect focuses its attention on some intelligible aspect common to the various things; different intelligibilities, on the other hand, constitute separate acts of knowledge. From this analysis in the way of inquiry, St. Thomas moves to the causal level and the way of demonstrative exposition.

> From this it is evident that many things, insofar as they are distinct, cannot be understood all at once; but insofar as they are grouped together in an intelligible unity, they can be under-

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deinde, sed unum quid sit. Non enim simul intelliguntur inquantum habent ordinem distinctionis ad invicem, sed inquantum uniuntur in una propositione" (*De Ver.*, q. 8, a. 14 [ed. Marietti-Spiazzi, I, 170]).

[4]"If in thought you think each half [of a line] separately, then by the same act you divide the time also, the half-lines becoming as it were new wholes of length. But if you think it as a whole consisting of these two possible parts, then also you think it in a time which corresponds to both parts together" (Aristotle, *De Anima* III, vi, 430b11-14 [trans. J. A. Smith; from R. McKeon. *Basic Works of Aristotle* (New York: Random House, 1941)], pp. 592-93).

> stood together. Now anything is actually intelligible insofar as its likeness is in the intellect. Hence, all things that can be known through one intelligible *species* are known as one intelligible object and thus are understood together. But those things that are known through different intelligible *species* are apprehended as different intelligible objects.[5]

The article is concluded with an application of this analysis to the angelic intellect.

Though it is an extremely concise piece of writing, the *Summa* article is a good example of a method of procedure that is distinctly philosophical: the movement from experience and the stage of discovery to a judgmentally organized causal exposition which sketches the necessity seen in the evidence. The formal analysis seen in the early *De Veritate* treatment of the question is dropped. And the experiential analysis—which in fact is found in a somewhat similar form at the *end* of the *De Veritate* text— is used as the way of *approaching* the same problem in the *Summa*. The formal, logical analysis is helpful for details, but it is not necessary for answering the

[5] "Respondeo. Dicendum quod sicut ad unitatem motus requiritur unitas termini, ita ad unitatem operationis requiritur unitas obiecti. Contingit autem aliqua accipi ut plura, et ut unum; sicut partes alicuius continui. Si enim unaquaeque per se accipiatur, plures sunt; unde et non una operatione, nec simul accipiuntur per sensum et intellectum. Alio modo accipiuntur secundum quod sunt unum in toto, et sic simul una operatione cognoscuntur tam per sensum quam per intellectum, dum totum continuum consideratur, ut dicitur in III *De An.* Et sic etiam intellectus noster simul intelligit subiectum et praedicatum, prout sunt partes unius propositionis; et duo comparata, secundum quod conveniunt in una comparatione. Ex quo patet quod multa secundum quod sunt distincta, non possunt simul intelligi; sed secundum quod uniuntur in uno intelligibili, sic simul intelliguntur. Unumquodque autem est intelligibile in actu, secundum quod eius similitudo est in intellectu. Quaecumque igitur per unam speciem intelligibilem cognosci possunt cognoscuntur ut unum intelligibile; et ideo simul cognoscuntur. Quae vero per diversas species intelligibiles cognoscuntur, ut diversa intelligibilia capiuntur. Angeli igitur . . ." (*ST*, q. 58, a. 2 [ed. Ottawa, I, 351b45-52a24]).

[6] "Respondeo dicendum, quod causa quare non possunt plura simul intelligi in actu, haec est quam Algazel assignat, quia oportet semper intellectum configurari actu secundum speciem rei intelligibilem, quam apud se habet, rei intellectae in actu, ut sit assimilatio utriusque quae exigitur ad cognitionem rei. Sicut autem impossibile est corpus secundum eamdem partem diversimode figurari diversis figuris, ita impossibile est unum intellectum diversis simul speciebus ad diversa intelligenda actu informari; et ideo considerandum est, quod quicumque intellectus plura intelligit per plures species, oportet quod ea non simul intelligat, ut patet in intellectu humano secundum statum viae a rebus accipiente . . ." (*In II Sent.*, d. 3, q. 3, a. 4 [(ed. Mandonnet, II, 123]).

precise question at hand. In fact, it throws no light on the point that the same object can be known under one or many of its intelligible aspects; to establish this fact, an analysis of experience is necessary.

That an example of this sort indicates an evolution in St. Thomas's way of handling a philosophical problem is confirmed by a glance at his *Commentary on the Sentences* (1254-56, thus antedating the *De Veritate*) and at the *Summa contra Gentiles* (1258-64, thus falling chronologically between the *De Veritate* and the *Summa Theologiae*). In the *Commentary* treatment, Aquinas cites Algazel's reason for saying that many things cannot be understood at one time: the intellect is determined to actual understanding of a thing by a single intelligible *species*. St. Thomas then goes on simply to elucidate the impossibility of an intellect's being simultaneously informed by different *species*. This judgmental elaboration does not possess the intricate detail of the formal analysis seen in the *De Veritate;* nor, on the other hand, is the experiential analysis found in the *Summa Theologiae* text seen here.[6]

In the *Contra Gentiles*, Aquinas's treatment is very brief, and the matter is tersely summarized according to the way of judgmental exposition. In spite of the relative brevity of the discussion, however, St. Thomas does introduce the experiential evidence developed later in the *Summa Theologiae*, placing emphasis on the intellect's ability to consider what it wishes and thus to form intelligible *species* representative of many things under one intelligible aspect.

> Since a substance which understands is also a substance which wills and hence is the mistress of its own act, it is in its power after it has an intelligible *species* to use it for actual understanding, or if it has many *species* to use one of them. Hence it is that we do not actually consider all those things of which we have knowledge. Thus, an intellectual substance, having knowledge through many *species*, uses the one that it wishes and thus actually knows at one time everything which it does know through one *species*. For, all things are as one intelligible object to the extent that they are known through one thing, just as our intellect simultaneously knows many things composed with each

other or related in a certain unity. But those things that it knows through different *species* it does not know at one time.[7]

It may also be noted that this text does not exhibit the maturity and precision of organization seen in the *Summa Theologiae* article, even in the presentation of evidence.

Thus, in historical order, St. Thomas's method of handling this matter seems to have developed from (1) a simple judgmental elucidation of an *auctoritas;* to (2) a complex and detailed formal analysis, with the pertinent experiential evidence tacked onto the end of the discussion; to (3) a judgmental summary with some emphasis placed on the experiential aspects of the problem; and finally to (4) a complete and well-ordered philosophical argument, the stage of demonstration and causal explanation being prefaced with the moment of inquiry and experiential analysis. Although St. Thomas's doctrine remains essentially the same throughout all four treatments of the problem, the examination of cognitive experience, as we have noted, enables the real philosophical issue to be pinpointed.

Now, the question discussed above is quite identically stated in all of the texts cited—whether angels or intellectual substances can understand many things at one time. Thus, the *question itself* is clearly determined throughout Aquinas's works, even though there is a significant shift in the manner of handling the philosophical aspects of the problem (which becomes theological, insofar as three of the four texts discuss how angels know through the Word). And because of the doctrinal consistency found here, the threads of methodological evolution in St. Thomas's various approaches stand out quite clearly against

[7]". . . Sed sciendum est quod non omne illud est intellectum in actu cuius species intelligibilis actu est in intellectu. Cum enim substantia intelligens sit etiam volens, ac per hoc sit domina sui actus, in potestate ipsius est, post quam habet speciem intelligibilem, ut ea utatur ad intelligendum actu; vel, si habet plures, ut utatur una ipsarum. Unde et ea quorum scientiam habemus, non omnia actu consideramus. Substantia igitur intellectualis, per plures species cognoscens, utitur una, qua vult, ac per hoc simul actu cognoscit omnia quae per unam speciem cognoscit: omnia enim sunt ut unum intelligibile inquantum sunt per unum cognita; sicut et intellectus noster simul cognoscit multa ad invicem composita vel relata ut unum quiddam. Ea vero quae per diversas species cognoscit, non cognoscit simul. Et ideo, sicut est intellectus unus, ita est intellectum in actu unum . . ." (*CG*, II, cap. 101 [ed. Leon, man., p. 225]).

[8]*Opera Omnia* (Cologne: Aschendorff, 1955), II, 18-44.

[9]The principal texts on this matter are: *In III Sent.*, d. 31, q. 2, a. 4; *De Ver.*, q. 19, a. 1; *CG*, II, cap. 81; *De An.*, a. 15; *Quodl.* III, q. 9, a. 1; *ST*, I, q. 89, a. 1; *In I Cor.*, cap. 13, lect. 3.

the over-all pattern of thought. We may now proceed to a more complex series of texts, where we shall be concerned not only with a shift in procedure but also with the doctrinal development that accompanies the change in method.

Example 2: Doctrinal Development through Evolution of Method

The problem of the state of the human soul after death was a popular speculative question among medieval thinkers. St. Albert, for example, devotes half of his *Liber de Natura et Origine Animae* to this matter, exploring throughout the course of seventeen chapters the opinions of Plato, Avicenna, Algazel, Averroes, Avempace, Pythagoras, the Epicureans, and others.[8] St. Thomas himself is especially interested in the cognitive aspects of this problem, and he discusses it throughout his writings.[9]

Now, within this theologically oriented frame of reference, Aquinas finds it necessary to take up the matter of phantasms in human understanding. For, if the human intellect must use phantasms in its state of union with a body, how will the intellective soul have knowledge after it has been separated from the body and from material phantasms? Thus, the context outlined above is one of those in which the question of the necessity for phantasms in human understanding especially arises; for in St. Thomas's early writings this question is not handled as a distinct philosophical issue. Following this question through his writings (and prescinding from the larger issue of the knowledge had by separated souls), we shall observe how it emerges as a separate problem.

Turning his attention in the *Commentary on the Sentences* to the matter of knowledge after death, Aquinas writes of the way we understand in this life:

> It is the intellect's way of acting that it understand with a phantasm, since what the Philosopher says in III *De Anima* is true for our present state: in no way could the soul understand without a phantasm, not only with regard to the acquisition of knowledge, but also with respect to a person's consideration of

those things that he already knows. For phantasms are related to the intellect as sensible objects are to sense . . .

This manner of understanding is proper to the human soul for two reasons. The first is that the human soul is the last according to the order of nature in the grades of intellect. Hence, the soul's possible intellect is related to all intelligible objects as prime matter is related to all sensible forms. For this reason it cannot go into act before it receives the *species*, and this comes about through sense and imagination.

A second reason is that the human soul is the form of a body. Hence, its operation must be an operation of the whole man. And thus the body joins in, not as an instrument through which the soul operates, but as representing the object; and this the phantasm does. Hence it is that the soul cannot understand without a phantasm even those things that it knew previously.[10]

[10]"Modus autem agendi est ut intelligat cum phantasmate, quia in statu viae verum est quod dicit Philosophus in III *De anima*, quod nequaquam sine phantasmate intelligeret anima non solum quantum ad acquirendam scientiam, sed etiam quoad considerationem eorum quae quis jam scit; quia phantasmata se habent ad intellectum sicut sensibilia ad sensum. . . . Modus autem intelligendi praedictus accidit humanae animae ex duobus.—Uno modo ex hoc quod anima humana est ultima secundum naturae ordinem in gradibus intellectus. Unde se habet intellectus ejus possibilis ad omnia intelligibilia, sicut se habet materia prima ad omnes formas sensibiles; propter hoc non potest in actum exire prius quam recipiat species: quod fit per sensum et imaginationem.—Alio modo ex hoc quod est forma corporis. Unde oportet quod operatio ejus sit operatio totius hominis. Et ideo communicat ibi corpus non sicut instrumentum per quod operatur, sed sicut repraesentans objectum, scilicet phantasma. Et inde contingit quod anima non potest intelligere sine phantasmate etiam ea quae prius novit . . ." (*In III Sent.*, d. 31, q. 2, a. 4 [ed. Moos III, 996-97]).

[11]St. Thomas will continue to use this statement as an *auctoritas* in these contexts throughout his writings, though he will move away from a simple commentary on it. J. A. Smith translates the pertinent section from Aristotle (*De An.* III, vii, 431a14-16) as follows: "To the thinking soul images serve as if they were contents of perception (and when it asserts or denies them to be good or bad it avoids or pursues them). That is why the soul never thinks without an image" (McKeon, *Basic Works*, p. 594).

[12]"Ad septimum dicendum, quod nulla potentia potest aliquid cognoscere non convertendo se ad obiectum suum, ut visus nihil cognoscit nisi convertendo se ad colorem. Unde, cum phantasmata se habeant hoc modo ad intellectum possibilem sicut sensibilia ad sensum, ut patet per Philosophum in III *de Anima*, quantumcumque aliquam speciem intelligibilem apud se habeat, nunquam tamen actu aliquid considerat secundum illam speciem, nisi convertendo se ad phantasmata. Et ideo, sicut intellectus noster secundum statum viae indiget phantasmatibus ad actu considerandum antequam accipiat habitum, ita et postquam acceperit" (*De Ver.*, q. 10, a. 2, ad 7 [ed. Marietti-Spiazzi, I, 195]; cf. q. 10, a. 8, ad 1).

This text presents us with a basic doctrine that remains essentially unchanged throughout St. Thomas's works—that the human intellect must use phantasms in *any* act of understanding. But the point especially to be noted here is that the discussion is strictly demonstrative and closely tied to Aristotle's remark that the soul never thinks without phantasms.[11] Aquinas's emphasis on the body as an integral part of man and not simply an instrument is noteworthy, considering the dominance of Platonistic Augustinianism at Paris. However, the judgmental arguments given here are on the whole quite sketchy and not as clearly stated or as well pointed as the demonstrations we shall find in his later works. The argument based on the human intellect as the lowest form of intellect, for instance, does not appear in any of the later texts, perhaps because St. Thomas himself felt it to be weak; for the nature of the human intellect (involved in Aquinas's second reason above) is actually presupposed in any discussion of its place among other types of intellect.

The *De Veritate* presents no significant methodological development of this matter. In the historically elaborate article in which St. Thomas takes up the problem of the soul's knowledge after death (q. 19, a. 1), the necessity for phantasms in the present life is mentioned but not developed as fully as in the above text from the *Commentary*. However, the issue is introduced into a more strictly psychological context; in discussing the presence of memory in the human mind, Aquinas writes in answer to one of the objections that

> a potency cannot know anything without turning to its object, as sight does not have knowledge except by turning to color. Hence, since phantasms are related to the possible intellect as sensible objects are to sense (as the Philosopher makes clear in III *De Anima*), even though the intellect may possess some intelligible *species*, it never actually considers anything in accord with that *species* except by turning to phantasms. And thus, just as our intellect in its present state needs phantasms for actually considering anything before it receives a habit it also needs them after it has received the habit.[12]

St. Thomas again works directly from Aristotle's statement, basing his argument on the parallel found between the senses' need for a sensible

object and the intellect's need for phantasms. It may be noted that this analogy is valid only on the supposition that the intellect *does* require phantasms for its operation; the analogy is not a proof, and it presupposes the nature of the human intellect.

The above text from the *De Veritate* has been quoted especially to call attention to the term *se convertere*—the intellect's "turning to" phantasms—an expression that will keep recurring in later texts. Drawn from transient activity by extrinsic analogy, the phrase refers to no more than the necessity for a cognitive power to be united with its object in order to be knowing-in-act. Since (as was seen in the *Commentary on the Sentences*) the phantasm represents the real object of the intellect, it is precisely in its *representative* function that the phantasm is called the "object" of the intellect. It is the intellect's psychological object, therefore, and not that which the intellect knows. Aquinas's language in this context becomes more and more technical, and one must take care not to transfer his psychological or structural descriptions to the order of knowledge considered as a total experience.

Although none of the experiential evidence for the dependence of the human intellect upon phantasms is given in the *Commentary* and *De*

[13]The context in which this remark is made is again largely theological—"utrum in statu innocentiae pueri mox nati fuissent perfecti in cognitione." The objection is placed that the intellect needs the senses only for acquiring knowledge, just as one deprived of vision can recall his previously attained knowledge of color. Aquinas answers: "Cum phantasma sit objectum intellectus possibilis, ut dictum est, secundum statum viae, anima ad suum actum phantasmatibus indiget, non solum ut ab eis scientiam accipiat secundum motum qui est a sensibus ad animam, sed etiam ut habitum cognitionis quam habet circa species phantasmatum, ponat secundum motum qui est ab anima ad sensus, ut sic inspiciat in actu quod per habitum cognitionis tenet in mente. Unde etiam Dionysius dicit in *Epistola ad Titum*, quod illi qui intellectuales revelationes accipiunt, eas quibusdam figuris circumponunt; unde laesa imaginatione per laesionem organi, ut est in phraeneticis, intellectus impeditur ad [sic] actuali consideratione etiam eorum quae prius sciebat" (*In II Sent.*, d. 20, q. 2, a. 2, ad 3 [ed. Mandonnet, II, 514-15]).

[14]"Ad quintum dicendum quod phantasma est principium nostrae cognitionis, ut ex quo incipit intellectus operatio, non sicut transiens, sed sicut permanens, ut quoddam fundamentum intellectualis operationis, sicut principia demonstrationis oportet manere in omni processu scientiae, cum phantasmata comparentur ad intellectum ut obiecta, in quibus inspicit omne quod inspicit vel secundum perfectam repraesentationem vel per negationem. Et ideo quando phantasmatum cognitio impeditur, oportet totaliter impediri cognitionem intellectus etiam in divinis. Patet enim quod non possumus intelligere Deum esse causam corporum sive supra omnia corpora sive absque corporeitate, nisi imaginemur corpora, non tamen iudicium divinorum secundum imaginationem formatur" (*In de Trin.*, q. 6, a. 2, ad 5 [ed. Wyser, p. 65]).

Veritate texts already quoted, St. Thomas was certainly conscious of it at this time. In another place in the *Commentary on the Sentences*, having again mentioned that the intellect needs phantasms even for recalling previous knowledge, he adds that

> if the imagination is injured through damage of an organ, as in the case of the mentally diseased, the intellect is hindered from actually considering even those things that it already knows.[13]

A remark like this indicates that, in St. Thomas's own thinking, the human intellect's need for phantasms is not a proposition simply to be deduced from the nature of man, as one might be led to gather from the type of argument found in the first text from the *Commentary*, quoted above. It is true that, given the composite nature of man, one might argue aprioristically to the necessity for phantasms in every act of understanding in this life. However, there is *separate* evidence for this dependence, evidence over and above that which is needed to establish the nature of man. Thus, we already have indications in the Thomistic texts for the fact that this issue is susceptible of a complete philosophical treatment, by way of both judgmental demonstration *and* experiential inquiry.

The largely negative piece of evidence noted above is supplemented by a fuller and more positive consideration in the *Commentary on Boethius' De Trinitate* (1257-58, roughly contemporaneous with the *De Veritate*).

> The phantasm is the principle of our knowledge, as that from which the intellect's operation begins; it is not a fleeting thing, but rather remains as a kind of foundation of intellectual activity, just as principles of demonstration must remain in every procedure of science. For phantasms are related to the intellect as objects in which the intellect sees whatever it does see, whether through a perfect representation or through a negation. And hence, when knowledge of phantasms is obstructed, the intellect's knowledge must be totally obstructed even in divine science. For it is evident that we cannot know that God is the cause of bodies or transcends all bodies or is not a body unless we could imagine bodies. But a judgment about divine things is not formed according to the way we imagine them.[14]

The judgmental statement that opens the text again emphasizes the need for phantasms in any subsequent use of knowledge previously obtained (although the statement does not demonstrate this point). St. Thomas's description of the phantasm as a "foundation" for intellectual activity will be further elaborated in a later text. The use of the term *inspicere* to describe, in somewhat pictorial fashion, the intellect's need for phantasms may also be noted here; the intellect, as it were, "looks at" its object psychologically represented in the phantasm, and it "sees in the phantasm" whatever meaning it actually conceives of the object.

But the point especially to be noted with regard to this text is that the positive role of phantasms in understanding is suggested, and this is done in the light of a reflection on cognitive experience in the area of metaphysical knowledge. Thus, just as Aquinas's analysis of experience in the case of understanding many things at one time led to a statement of the way in which many things *can* be understood simultaneously—namely, if they are considered under one intelligible aspect—so, in the case at hand, his reflection on metaphysical knowing begins to bring out the real implications of the intellect's dependence upon phantasms. Phantasms, though they are not to be confused with the intelligible content of the judgment itself, must nevertheless be present as sensory representations or symbols of what is affirmed or denied in the act of judging; and in their representational, symbolic function they remain as the foundation of intellectual knowledge.

Written shortly after the *Commentary on Boethius' De Trinitate*, the *Summa contra Gentiles* will echo the terminology found in the above text. It is in this latter work that our problem finally emerges in a strictly philosophical context, where Aquinas is answering Averroes's

[15]I include here the rather involved argument leading into the text translated above: "Si ex phantasmatibus quae sunt in nobis intellectus possibilis non recipit aliquas species intelligibiles, quia iam recepit a phantasmatibus eorum qui fuerunt ante nos; pari ratione, a nullorum phantasmatibus recipit quos alii praecesserunt. Sed quodlibet aliqui alii praecesserunt, si mundus est aeternus, ut ponunt. Nunquam igitur intellectus possibilis recipit aliquas species a phantasmatibus. Frustra igitur ponitur intellectus agens ab Aristotele, ut faciat phantasmata esse intelligibilia actu.

"Praeterea. Ex hoc videtur sequi quod intellectus possibilis non indigeat phantasmatibus ad intelligendum. Nos autem per intellectum possibilem intelligimus. Neque igitur nos sensu et phantasmate indigebimus ad intelligendum. Quod est manifeste falsum, et contra sententiam Aristotelis.

"Si autem dicatur quod, pari ratione, non indigeremus phantasmate ad considerandum ea quorum species intelligibiles sunt in intellectu conser-

doctrine concerning a single possible intellect for all men (Book II, chapter 73). St. Thomas here moves far beyond a simple refutation of Averroes's position, and it is clear that he is attempting to draw out all of the implications of his own teaching. The general framework at certain points of the argument turns out to be something like this: "Even if the preceding statements were true, which they are not, the following argument would not be true." It is in an intricate context of this sort that the question of the necessity for phantasms in human understanding arises. St. Thomas proceeds:

> The possible intellect, like any substance, operates in accord with its own nature; and according to its nature it is the form of the body. Hence, the intellect does understand immaterial things, but it sees them in some material thing. An indication of this is that in teaching abstract matters, particular examples are proposed, and in these the intellect sees what is stated.
>
> The possible intellect, therefore, is related to the phantasms which it needs, in one way before the reception of the intelligible *species*, and in another way after it has received the *species*.
>
> Beforehand, it needs the phantasm in order to receive from it the intelligible *species*. Hence, the phantasm is related to the intellect as an object which puts in motion.
>
> After the intellect has received the *species*, however, it needs the phantasm as a sort of instrument or foundation for its *species*. Hence, the intellect is related to phantasms as an efficient cause. For, upon the intellect's command, there is formed in the imagination a phantasm that is appropriate to a particular intelligible *species*, a phantasm in which the intelligible *species* shines forth as does an ideal pattern in an object that exemplifies or reflects it. . . . Hence, we see that when we have once received knowledge of something, it is within our power to consider it again at will. Nor do phantasms hinder us; for it is in our power to form phantasms suited to what we wish to consider.[15]

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vatae, etiam si intellectus possibiles sint plures in diversis: quod est contra Aristotelem, qui dicit quod *nequaquam sine phantasmate intelligit anima*:—patet quod non est conveniens obviatio. Intellectus enim possibilis, sicut et quaelibet substantia, operatur secundum modum suae naturae. Secundum autem suam

Though the argument that opens the text is extremely laconic, it is a real demonstration and not just a judgmental summary of the sort seen in some of the previous texts. The essential point of the whole matter is succinctly stated: The intellect must operate according to its determined nature; since it is naturally the form of a body, it must make use of the body when it understands anything, even immaterial objects, which it knows only by reason of its knowledge of material things. The force of St. Thomas's argument might be brought out by recalling that if a power possesses a determined nature it is not a free power. Hence, if the intellect is found to use corporeal phantasms in one instance of intellectual knowledge, it must use them in any act of understanding, even when noncorporeal objects are in question. This demonstration thus echoes the analysis seen in the text from the *Commentary on Boethius' De Trinitate.*

St. Thomas immediately proceeds to a consideration of what may be summarized as two experiential evidences. As an indication of the

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naturam est forma corporis. Unde intelligit quidem immaterialia, sed inspicit ea in aliquo materiali. Cuius signum est, quod in doctrinis universalibus exempla particularia ponuntur, in quibus quod dicitur inspiciatur. Alio ergo modo se habet intellectus possibilis ad phantasma quo indiget, ante speciem intelligibilem: et alio modo postquam recepit speciem intelligibilem. Ante enim, indiget eo ut ab eo accipiat speciem intelligibilem: unde se habet ad intellectum possibilem ut obiectum movens. Sed post speciem in eo receptam, indiget eo quasi instrumento sive fundamento suae speciei: unde se habet ad phantasmata sicut causa efficiens; secundum enim imperium intellectus formatur in imaginatione phantasma conveniens tali speciei intelligibili, in quo resplendet species intelligibilis sicut exemplar in exemplato sive in imagine. . . . Unde videmus quod illud cuius scientiam semel accepimus, est in potestate nostra iterum considerare cum volumus. Nec impedimur propter phantasmata: quia in potestate nostra est formare phantasmata accommoda considerationi quam volumus . . ." (*CG*, II, cap. 73 ad fin. [ed. Leon, man., pp. 175-76]).

[16]The context here makes clear that it is the *possible* intellect which is related to phantasms as efficient cause (and we can legitimately speak of the intellect as "schematizing" phantasms, insofar as it guides the imagination in the organization and combining of phantasms for more abstract thought activity). Although the causal role of the *agent* intellect is prescinded from in this text, this power cannot be said to have anything directly to do with the organization of images. For potential intelligibility is not "put into" phantasms by the intellect; the intellect as a higher power controls the imagination (which always operates according to its own sensory nature), but the intellect does not "do anything" to phantasms. The fact of experience involved here is that we can understand whatever we wish and that the recall of phantasms can be controlled. This does not permit a negation of the fact that *actual* intelligibility exists only in the intellect (and hence cannot be put into phantasms), and that *potential* intelligibility exists only in matter (and hence cannot be "given" to phantasms by the intellect). See *ST*, I, q. 54, a. 4; q. 85, a. 1, ad 3.

fact that immaterial things must be "seen in" or known through sensible objects, Aquinas calls attention to the fact that the effective teacher brings concrete examples to the aid of the student when abstract matters are in question. Though this evidence will be developed in a later text, it may be noted here that such concrete examples, in St. Thomas's mind, are not simply an aid to understanding. Rather, man necessarily and naturally understands the abstract through the concrete. Thus (if we may exploit this evidence) abstract knowledge learned apart from concrete examples is liable to be verbal knowledge; in this case, verbal phantasms would take the place of concrete phantasms, and the full meaning and implications of the abstract words represented in phantasms might remain quite unknown.

The second piece of evidence in the above text is tangent upon the experiential fact that, though we need phantasms to understand any intelligible object, we are nonetheless able to understand what we wish by forming the phantasms necessary for producing or recalling the appropriate intelligible *species*. In the light of this evidence, the relationship between possible intellect and phantasm is developed. As necessary instrument in the production or recall of a *species*, the phantasm is like an object that puts another thing in motion; for the intellect needs the phantasm in order to be determined to act. Thus, one idea cannot give rise to another without the instrumentality of a phantasm.

The intellect, on the other hand, is able to guide the power of imagination in the formation of phantasms suitable for the production or recall of a *species*, and in this function the possible intellect is related to phantasms as an efficient cause.[16] This relationship is tangent upon what experimental psychologists will often call "controlled association." In philosophical terms, the intellect is an efficient cause in controlling the imagination's preparation of suitable phantasms for organized thought activity, much as external perceived objects or the sense appetites are the efficient causes of the recall and combining of phantasms in instances of "free association."

Turning finally to the treatise on man in the *Summa Theologiae*, we find St. Thomas's most penetrating synthesis of the whole matter, one which makes use of all of his previous insights. The whole of

Question 84 of the *Prima Pars* is devoted to the problem of how man knows material reality; and St. Thomas here rather consistently locates his own teachings (often in the name of Aristotle) as a sort of middle path between materialism, usually represented by Democritus's sense empiricism, and Platonic exaggerated realism. The argument proceeds cumulatively throughout the question. Having established the fact of intellectual knowledge which, though obtained from sensible things, is universal and necessary (a. 1), Aquinas goes on to discuss the need for knowledge to be immaterial (a. 2) and the impossibility of innate knowledge in man (a. 3). This latter point, developed in the light of the intellect's essential union with a sensing body (a. 4), leads to a consideration of how the immaterial intellect receives genuine knowledge through the senses (aa. 5 and 6).

It is in this context that our problem finally emerges, in article 7, as a distinct philosophical *issue;* and it appears in the form of a complete philosophical argument, an analysis of experience according to the way of inquiry preceding judgmental organization according to the way of demonstrative exposition. To recapitulate the argument of Question 84 to this point (for the over-all context is important): Granted that the intellect, even though it is immaterial and essentially different from the senses, must obtain all knowledge through sense experience, still, cannot the intellect ever break away from the particularities of sense and sensory phantasms in its act of thought? St. Thomas answers that

> it is impossible for the intellect in its present state of union with a corruptible body to have actual understanding of a thing unless it turn to phantasms. Two evidences illustrate this fact.
>
> First of all, since the intellect is a power that does not in itself employ a bodily organ, it would in no way be hindered in its activity by damage done to an organ if its act did not require the act of some power that does make use of a bodily organ. Now such organs are employed by the senses, the imagination, and the other powers belonging to the sensitive order. Hence, it is evident that for the intellect actually to understand—not only when it attains new knowledge, but also when it uses knowledge

[17]In a different context, St. Thomas will assert that one of the primary roles of the teacher in learning is to present sensible examples from which the pupil can form the phantasms necessary for understanding. See, for example, *CG*, II, cap. 75 ad fin.; *ST*, I. q. 117, a. 1.

already acquired—there is need for an act of the imagination and the other sense powers. For when the activity of the imagination is obstructed by a damaged bodily organ (as in mentally diseased persons) or, again, when the activity of the memory is hindered (as in the case of drowsiness), we observe that a person is prevented from actually understanding even those things that he already knows.

Secondly, as anyone can observe from personal experience, when he is trying to understand something, he forms phantasms of some sort to serve as examples; and in these he as it were sees what he wants to understand. Thus it is that, when we wish to help a person understand something, we present examples to him, in order that from these he can form phantasms for the purpose of understanding.

The moment of inquiry here includes two evidences that we have already seen in earlier texts: the *negative* fact that thought is blocked by organic damage to the internal senses which contribute to the phantasm's formation (and here we could add the innumerable evidences of psychogenic as well as organogenic disorder brought to light by experimental psychologists); and the *positive* fact that phantasms, far from being a detriment to human thought activity, are found to be definitely helpful for learning and understanding.[17] Both evidences are elaborated more fully here than in the earlier texts. Aquinas then moves to the causal level and the moment of judgmental demonstration.

The reason for this is that a knowing power is proportioned to the thing known. Hence, the proper object of an angelic intellect, which is completely separate from a body, is an intelligible substance separate from a body; and through intelligible objects of this sort the angel knows material things. The human intellect, on the other hand, which is united to a body, has as its proper object a quiddity or nature existing in corporeal matter; and through such natures of visible things the human intellect rises to some knowledge of things that are not visible.

Now it is characteristic of such a nature to exist in an individual thing that has no existence apart from corporeal matter. For

instance, it belongs to the nature of a stone to be in this particular stone, and to the nature of a horse to be in this particular horse, and so on. Hence, the nature of a stone or of any other material thing cannot be known completely and truly unless it be known as existing in the particular. And we apprehend the particular through sense and imagination.

Thus, for the intellect actually to understand its proper object, it must necessarily turn to phantasms in order to perceive a universal nature existing in the particular. If, however, the proper object of our intellect were a separated form, or if, as the Platonists assert, the forms of sensible things subsisted apart

[18]"Respondeo. Dicendum quod impossibile est intellectum secundum praesentis vitae statum, quo passibili corpori coniungitur, aliquid intelligere in actu, nisi convertendo se ad phantasmata. Et hoc duobus indiciis apparet. Primo quidem quia, cum intellectus sit vis quaedam non utens corporali organo, nullo modo impediretur in suo actu per laesionem alicuius corporalis organi, si non requireretur ad eius actum actus alicuius potentiae utentis organo corporali. Utuntur autem organo corporali sensus et imaginatio et aliae vires pertinentes ad partem sensitivam. Unde manifestum est quod ad hoc quod intellectus actu intelligat, non solum accipiendo scientiam de novo, sed etiam utendo scientia iam acquisita, requiritur actus imaginationis et ceterarum virtutum. Videmus enim quod impedito actu virtutis imaginativae per laesionem organi, ut in phreneticis, et similiter impedito actu memorativae virtutis, ut in lethargicis, impeditur homo ab intelligendo in actu etiam ea quorum scientiam praeaccepit. Secundo, quia hoc quilibet in seipso experiri potest, quod quando aliquis conatur aliquid intelligere, format sibi aliqua phantasmata per modum exemplorum, in quibus inspiciat quod intelligere studet. Et inde est etiam quod quando aliquem volumus facere aliquid intelligere, proponimus ei exempla, ex quibus sibi phantasmata formare possit ad intelligendum.—Huius autem ratio est quia potentia cognoscitiva proportionatur cognoscibili. Unde intellectus angeli, qui est totaliter a corpore separatus, obiectum proprium est substantia intelligibilis a corpore separata; et per huiusmodi intelligibilia materialia cognoscit. Intellectus autem humani, qui est coniunctus corpori, proprium obiectum est quidditas sive natura in materia corporali existens; et per huiusmodi naturas visibilium rerum etiam in invisibilium rerum aliqualem cognitionem ascendit. De ratione autem huius naturae est quod in aliquo individuo existat, quod non est absque materia corporali; sicut de ratione naturae lapidis est quod sit in hoc lapide, et de ratione naturae equi est quod sit in hoc equo, et sic de aliis. Unde natura lapidis, vel cuiuscumque materialis rei, cognosci non potest complete et vere, nisi secundum quod cognoscitur ut in particulari existens. Particulare autem apprehendimus per sensum et imaginationem. Et ideo necesse est ad hoc quod intellectus actu intelligat suum obiectum proprium, quod convertat se ad phantasmata, ut speculetur naturam universalem in particulari existentem. Si autem proprium obiectum intellectus nostri esset forma separata; vel si formae rerum sensibilium subsisterent non in particularibus, secundum Platonicos, non oporteret quod intellectus noster semper intelligendo converteret se ad phantasmata" (*ST*, I, q. 84, a. 7 [ed. Ottawa I, 521b4-22a20]).

[19]See *ST*, I, q. 84, a. 8; q. 85, aa. 1, 5, 8; q. 86, a. 2; q. 87, a. 3.

[20]See *ST*, I, q. 78, a. 1; q. 79, aa. 2, 7; q. 79, a. 9, ad 3.

from particulars, our intellect would not always have to turn to phantasms in an act of understanding.[18]

The argument by "proper object" used here is correlative and quite equivalent to the *Contra Gentiles* demonstration in terms of the nature of the human intellect, as quoted in the preceding pages. For it is a direct consequence of the essential union of the human *intellect* with a *material* body that, whatever man knows in an *intellectual* fashion, he knows ultimately because of his primitive experience of *material* reality. Invisible and immaterial objects are not directly and immediately proper to the human intellect, as they are for the angelic intellect. Rather, the object that is proper to man's intellect—the object that is directly proportioned to the human intellect precisely *as human*—is some immediately intelligible aspect or quiddity or nature of a sensible thing.

It is worthwhile noting that this is the first time in the treatise on man in the *Summa Theologiae* that St. Thomas speaks of the "proper object" of the human intellect. He exploits this analysis and this particular terminology in later articles; [19] but up to this point he has only spoken of the object of intellect qua intellect (being, *ens universale*) or of the formality under which any intellect attains its object (*ratio entis*).[20] This is, however, the most meaningful context in which to introduce this terminology; for it is the phantasm which psychologically presents to the human intellect its proper object. Thus, the judgmental exposition in terms of proper object found in this text is an advancement over the demonstration in the broader terms of the determined nature of the human intellect as seen in the *Contra Gentiles* or the *Commentary on the Sentences;* for the analysis by proper object is more closely related to the psychological question of phantasms and their positive role in human understanding.

The present text lays the foundation for knowledge of the singular and the conformity of the intellect with reality in judgment. Since a sensible object is known *in* its particularity only by the powers of sense, intellectual knowledge of the singular will have to be a *composite act* of intellect and sense, in which the intellect knows *as* particular that which the phantasm represents. And because the intellect can know concrete singulars only in a composite act with sense, formal

truth will involve, psychologically speaking, a turning of the intellect to phantasms, in which a universal is seen as realized in the concrete existent represented in the phantasm.[21]

However, St. Thomas prescinds in this text from any explicit discussion of these matters. In the light of the over-all context of Question 84 and of this article in particular, the phrase "complete and true" intellectual knowledge (adverbially expressed in the text—*complete et vere cognoscere*) does not mean that absolutely all human knowledge is judgmental. Rather, it here seems to mean nothing more than that "seeing an intelligibility in phantasms" is the way of knowing proper to the human intellect precisely as human; for the universal exists only in the particular, and there is no other way the human intellect can get at the universal except by finding it in the particular, seeing it in the phantasm. Thus, Platonic knowledge turns out to be a form of angelic knowledge; it would not be "complete and true" intellectual knowledge for man, simply because it is not the way man knows *secundum modum naturae* in his present state.

Maintaining the historical framework that he constructs throughout Question 84, Aquinas exemplifies the proper object of the human intellect with universals that have a direct foundation in reality; the notions of "horse" and "stone" are most convenient for contrasting his own teaching with that of the Platonists. However, if we may be permitted to draw out the full implications of the text and to make a further use of the evidence that St. Thomas himself suggests, a further conclusion can be made. We can at this point see *why* abstract matters are best learned when seen in concrete examples, why sensible

[21]For a thorough textual study on knowledge of the singular and the different terms St. Thomas uses to express the intellect's activity in such knowledge, see G. P. Klubertanz, S.J., "St. Thomas and the Knowledge of the Singular," *New Scholasticism*, XXVI (1952), 135-66.

[22]Any verbalization of a philosophical judgment is, of course, a symbolization; and any extrinsic analogy will to some extent involve symbolic rather than completely ontological knowledge (for example, conceiving composite acts of the mind in terms of a matter-form composition, or conceiving immanent activity in terms borrowed from our experience of transient action). Thus, any symbol can have a more or less perfect correspondence with the reality in question and hence can be more or less helpful in the actual understanding of the reality. The point emphasized above (and in Aquinas's text) is the psychological efficacy of a *concrete* symbol. St. Thomas's use of concrete images like the ones suggested above might be the subject of a fruitful textual study. In this context, it is worthwhile to note the symbolic import not only of extended examples but also of *single terms* which St. Thomas will use to describe some reality; for example, "seeing a meaning in" phantasms and "turning to" phantasms are quite concrete ways of conveying the intellect's real activity.

examples are a positive aid to understanding. "Sensible examples" of any sort function at the level of the intellect's proper object, insofar as they are concrete and directly intelligible representations of the more abstract ideas that the intellect understands. Hence, when abstract meanings are attached to, or read into, concrete singulars, the intellect in its turn can "see the meaning in" the phantasms, which thus serve as *symbols* of the abstract meaning.

This is an important point, especially in the light of St. Thomas's own persistent practice of exemplifying his philosophical teachings, of supplying images for an abstract proposition. The archer aiming his arrow at a target is not a direct and perfect representation of *in*trinsic finality; nor does the image of the air illuminated by sunlight exhaust the implications of the relationship between essence and the act of existing; nor, again, is light illuminating color a direct representation of the agent intellect's function in knowledge. But perfect correspondence between meaning and thing is not the point here. Rather, by attaching a philosophical meaning to images of concrete situations with which his readers were familiar and often to images drawn from medieval physics or biology—in other words, by *symbolizing*—Aquinas brings abstract philosophical principles in a symbolic form back to the level of objects which in their concreteness are more directly proportioned, more immediately intelligible, more *proper* to the human intellect as human.[22]

At this point, viewing St. Thomas's treatment of the problem of phantasms in understanding as a whole, we find a methodological evolution that somewhat parallels the shift in procedure seen in the first series of texts concerning the unicity of intelligible *species* in acts of understanding. Beginning with more simple judgmental commentaries on an *auctoritas* (a statement of Aristotle, in the present case), Aquinas gradually proceeds through analyses of further experiential evidence of the intellect's dependence upon phantasms, eventually arriving at a complete philosophical argument with the two stages of inquiry and demonstration. In contrast to our first series of texts, however, where the philosophical issue was determined from the start, the second group reveals an evolution of the question itself—a gradual emergence, from theologically connotative contexts, of a problem that becomes more and more distinctly a separate philosophical

issue. Thus, when the problem of the knowledge of separated souls finally arises in the *Summa Theologiae* (and this is the context in which St. Thomas's first detailed analysis of our question originally appeared), Aquinas is able to refer the reader to his previous discussion of the need for the intellect to turn to phantasms; and he does so with the significant remark that this necessity *patet per experimentum.*[23]

Now the salient point concerning this twofold development, as has already been suggested, is that St. Thomas's more and more careful reflection on experience seems to be the chief factor contributing to this evolution. For, while the bare *fact* of the intellect's dependence upon phantasms might be judgmentally established by a simple demonstration in terms of the structure of human nature, analysis of evidence seems to have indicated to St. Thomas that the issue was not as simple as that. The fact is that the various positive functions of the phantasm in human intellection as well as the complementary relationship existing between possible intellect and phantasm cannot be brought to light except by an experiential analysis. And thus, in the *Summa Theologiae*, we find Aquinas making his judgmental demonstration in terms of the pertinent evidence itself; for the argument by proper object, which necessarily implies the determined nature of the human intellect and the composite structure of man, is, as we have noted, adapted precisely to the matter of the intellect's need for phantasms as this need is actually experienced.

Concluding Observations

The analysis conducted throughout this study gives some indication of the fact that St. Thomas's teaching on philosophical method, summarized at the beginning of this paper, is quite a different thing from his own use of that method. Although we have no real way of knowing precisely how he handled philosophical matters in his class lectures, there is sufficient evidence in his writings to indicate an increasing concern for careful analysis of experience. Aquinas's later works evidence in their judgmental organization and demonstrative arguments a precision, a care for evidential detail and a unification of data that are not nearly as remarkable in his earlier writings; and the

[23] See *ST*, I, q. 89, a. 1.

sort of analysis conducted in the present study indicates that this precision in the stage of demonstrative exposition is to no small extent due to greater attention to the stage of inquiry.

That Aquinas's own use of scientific method should have undergone a gradual evolution is not surprising. St. Thomas, after all, like any thinker, was a man of his own age. Philosophical problems, if they did not actually arise first in theological contexts, were in his day at least chiefly oriented in their solutions toward answering theological questions. Thus, although he was extremely well read in the writings of Aristotle and other philosophers, St. Thomas would at first bring this knowledge to bear upon contemporary questions and in a contemporary context. In practice, this initial application would involve judgmental statements drawn from, and elaborated out of, the thought of his masters rather than a concern for detailed and intricate verification of such statements through lengthy reflection on experience. Though even the earliest of St. Thomas's writings reveal a rather clear line between theological doctrines and philosophical analyses, the balance between reason and revelation seen in a later work like the *Summa Theologiae* would not be something to be achieved in a day. It is suggested, then, that the type of methodological shift illustrated in the present study was a most important factor in this historical achievement.

Turning from the milieu in which we find St. Thomas writing to the psychological truths in the light of which he presents his teachings, we might profitably conclude our inquiry by drawing together two lines of thought, reading Aquinas's doctrine on the nature of philosophical method in the light of the second series of texts discussed above. As has been noted, it is an essential point in St. Thomas's teaching that a scientific conclusion be seen in the light of the first principles or sources—including the data of sense experience—which give rise to the conclusion and provide it with scientific validity. Now, the human intellect knows abstract meanings only by reason of its directly intelligible experience of concrete reality. It knows them ultimately because of its contact with the objects proper and directly proportioned to it by nature. From this it follows that the resolution of a metaphysical meaning or of any scientific conclusion to sense data is not merely a requisite for scientific validity but also a psychological

necessity. Seeing a conclusion in the light of concrete evidence is for man the *natural* way of attaining truth. And reading an abstract meaning into sensory signs that may symbolize it at the level of the intellect's proper object is the *natural* way of maintaining that grasp on truth.

The real nature of human understanding thus suggests a lesson to the contemporary Thomist who is interested in really *telling* the truth of philosophy in contemporary language, in a contemporary milieu, in the light of what experiential evidence is further revealed in contemporary experimental sciences. For St. Thomas could not conceive philosophical demonstration apart from evidential inquiry to be psychologically coercive, much less scientifically valid. And, learned apart from an analysis of experience and in isolation from symbols which may render truth more meaningful to the contemporary mind, philosophy could not be viewed by him as a truly *human* enterprise. Aquinas told the truth in his day. But the *way* he told it will not always be the human way of telling it again in our own day.

Leonard A. Kennedy, C.S.B.

THE NATURE OF THE HUMAN INTELLECT ACCORDING TO ST. ALBERT THE GREAT

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The place of St. Albert the Great in the thirteenth-century synthesis of Greek, Arabian, and Christian philosophy has not yet been fully established. There are still required detailed investigations of many aspects of his thought. This paper proposes to examine one of these aspects; namely, his doctrine of the nature of the human intellect. Concerning this doctrine, it is still the fashion to hold that St. Albert's teaching is substantially the same as that of his pupil, St. Thomas Aquinas.[1] We propose to demonstrate that such a view is erroneous and that on this point St. Albert closely followed Averroes.

The most formidable obstacle to this demonstration is the historians' fear of accepting St. Albert's purely philosophical treatises as stating his own thought. After all, St. Albert has declared:

> All these things, however, are said according to the opinion of the Peripatetics, because we are not saying anything of our own in these matters or in other matters in the field of philosophy, for we are not here attempting to explain our own doctrine in philosophy, but shall state it elsewhere.[2]

As positive and all-inclusive as it seems, this statement and others like it do not prevent us from making legitimate use of some of St. Albert's works. The first justification for this use is his own declaration in certain important texts that what he writes expresses his personal conviction:

And because I am undertaking things which are most difficult, yet most worthy of being known, I therefore wish first of all to explain as well as I can all that Aristotle teaches, and then mention the opinions of other Peripatetics, and after this to consider Plato's opinions, and then finally to give my own opinion.[3]

To these doubts, however, we wish first of all to give the response of some philosophers, and afterwards add what we think should be said of these matters.[4]

However, because of the excellence of the doctrine, we wish to make an examination here in order to pass judgment on all the operations of the intellect together, as much as God will give us

[1]A. Schneider, *Die Psychologie Alberts des Grossen . . .* in *Beiträge zur Geschichte der Philosophie des Mittelalters* (Münster), IV, 5-6 (1903, 1906), p. 233. G. Reilly, *The Psychology of St. Albert the Great compared with That of St. Thomas* (Washington, 1934), pp. 44, 57.

There are others who do not draw the comparison between St. Albert and St. Thomas, but who give a description of St. Albert's doctrine which is the same as that given by the above. See U. Dahnert, *Die Erkenntnislehre des Albertus Magnus . . .*(Leipzig, 1933), pp. 77-79. See also A.-M. Ethier, "Les parties potentielles de l'intellect chez S. Albert le Grand," *Etudes et Recherches Publiées par le Collège Dominicain d'Ottawa*, III (1938), 63-93; and R. Z. Lauer, "St. Albert and the Theory of Abstraction," *Thomist*, XVII (1954), 69-83.

[2]*Metaphysics*, XI, 1, 9; VI, 598. (All references to St. Albert's works are to *Alberti Magni Opera Omnia*, ed. A. Borgnet [38 vols.; Paris: Vives, 1890-99]. The volume and page are cited.) Similar statements of St. Albert may be found in *De Causis et Processu Universitatis*, II, 5, 24; X, 619, and in G. Meersseman, *Introductio in Opera Omnia B. Alberti Magni*, O.P. (Bruges, 1931), p. 7.

[3]*De An.*, III, 2, 1; V, 330.

[4]*Ibid.*, 3; V, 335.

[5]*Ibid.*, 3, 6; V, 378.

[6]*De Unit. Intell.*, cap. 7; IX, 469. See also cap. 1; IX, 437.

[7]". . . breviter naturam intellectus explanantes, et nostram de eo opinionem ponentes: quia nos haec quae hic dicimus, alibi probavimus, et prolixe tradidimus (*ibid.*, cap. 6; IX, 462).

[8]G. Meersseman also concludes that legitimate use may be made of many of St. Albert's paraphrases. See *Introductio in Opera Omnia B. Alberti Magni*, O.P., p. 8. The same opinion is voiced by A. Schneider, *Die Psychologie Alberts des Grossen . . .*, pp. 4-8, 294-308.

[9]For the sake of brevity we omit references concerning the dating of St. Albert's works.

[10]"Forma sensati per seipsam generat se in medio sensus secundum esse sensibile . . . Frustra quaeritur, quid conferat ei illud? sicut si quaeritur, quid conferat luci lucere secundum actum?" (*De An.*, II, 3, 6; V, 242). "Haec autem dubitatio [de sensu agente] magna indiget consideratione, et in sequenti capitulo secundum facultatem nostram determinabitur" (*ibid.*, II, 3, 3; V, 236). "Omnis sensus est susceptivum specierum sine materia" (*Sum. de Creat.*, P. II, q. 34, a. 3, sol.; XXXV, 303). "Omnis potentia quae fit in actu per susceptionem formae alicujus agentis in ipsam, est passiva: sensus est potentia hujusmodi: ergo sensus est potentia passiva" (*ibid.*, a. 1; XXXV, 294). "Sensus nihil transmutat, sed potius transmutatur ab objecto" (*ibid.*).

[11]St. Augustine, *De Genesi ad Litteram*, XII, 16, 32-33. Also *De Musica*, VI, 5, 8.

light in these matters. But first we wish to indicate what the Peripatetics have said concerning this question, and then our own teaching. And we shall show how it agrees with or differs from what the other Peripatetics have said.[5]

The second justification for employing St. Albert's philosophical tractates is his approval of parts of them in other works which certainly represent his own opinion. For example:

> And this is what can more truly be said concerning the intellect and its nature. We have disputed about this more fully in the book dealing with the perfection of the soul, which is the second part of the book *De Intellectu et Intelligibili* which we wrote.[6]

This quotation is from a work in which St. Albert was giving his own teaching. It was composed at the request of Pope Alexander IV and incorporated in large part into St. Albert's *Summa Theologiae.* Moreover, St. Albert explicitly endorses it.[7]

Having now established the possibility of utilizing St. Albert's philosophical writings, we must nevertheless be careful to establish that the actual texts to which we shall refer truly present his own doctrine. This complicates our task but is absolutely necessary. The reader may rest assured that every employment of important texts of this kind will be vindicated before our final conclusions are drawn.[8]

The philosophical commentaries in question were composed between 1257 and 1270, according to more recent opinions.[9] The ones with which we are concerned, in their order of composition, are the following: *De Anima, De Sensu et Sensato, De Intellectu et Intelligibili, De Natura et Origine Animae, Metaphysicorum Libri XIII,* and *De Causis et Processu Universitatis.* The other writings of St. Albert to which reference will be made are: *Summa de Creaturis* (before 1243), *Commentary on the Sentences* (1243-1249), *De Unitate Intellectus contra Averroem* (1256-1257), and *Summa Theologiae* (1270-1280).

We may begin the account of the Albertine doctrine of the intellect by noting that both the senses and the possible intellect are passive powers. By an immaterial operation natural to them, physical objects produce sensory species which act on the external senses.[10] St. Albert is well aware that St. Augustine [11] denied the passivity of the powers of

sense but nevertheless considers that the senses may be acted upon in a spiritual manner.[12]

The internal senses are likewise passive. The common sense is active, it is true, but also receptive, being "distinguished" by

[12]"Opinio autem secunda [de passiitate sensuum] . . . erat . . . Augustini et multorum aliorum magnorum virorum. Tamen sine praejudicio aut ego non intelligo eos, aut ipsi falsum dixerunt . . . Et sic communicantiam habent forma sensibilis agens et sensus patiens, in eo quod sicut sensus spiritualiter patitur, ita etiam forma sensibilis spiritualiter agit in ipsum" (St. Albert, *De An.*, II, 3, 6; V, 243-44).

[13]*Ibid.*, 4, 12; V, 313.

[14]*Ibid.*, III, 1, 3; V, 318.

[15]"Intellectus autem possibilis sicut recipiens et subjectum intelligibilium" (*Sum. de Creat.*, P. II, q. 56, a. 6; XXXV, 476).

[16]"Anima rationalis [secundum intellectum possibilem] . . . non movetur aliqua specie motus physici, licet ibi sit transmutatio secundum species intelligibiles" (*ibid.*, q. 55, a. 4, part. 1, ad 4; XXXV, 470). (See also *De An.*, III, 2, 17; V, 361.)

[17]"Possibilis enim intellectus transmutatur ex alio quod est intellectus agens, et sua transmutatio est exitus de potentia intelligendi ad actum intelligendi" (*Sum. de Creat.*, P. II, q. 56, a. 1, sol.; XXXV, 478).

[18]Aristotle, *De Anima* III, 5, 430a13-17.

[19]"Color est visibilis non omni modo, sed in ratione formali, hoc est, per actum luminis, qui dat ei actum et speciem secundum quod potest agere in visum" (St. Albert, *Sum. de Creat.*, P. II, q. 21, a. 3, part. 1, sol.; XXXV, 188). "Cum igitur constet actum colorum esse lumen . . ." (*Sens. et Sens.*, II, 1; IX, 39).

[20]"Esse autem formale coloris est esse coloris quo est actu in potentia activa immutandi visum secundum actum: et hoc esse color visus habet a luce" (*Sum. de Creat.*, P. II, q. 21, a. 1; XXXV, 182-83).

[21]"Color enim secundum actum cum lumine quo agit, unum visibile est: sicut materia et forma non faciunt duo, sed unum: et ideo cum lumen illud sit ut forma, color autem ut materia, erit ex illis duobus unum visibile secundum actum: et ideo visus non est nisi unius visibilis" (*ibid.*, a. 3, part. 3, sol.; XXXV, 200). This is from Averroes, *De Anima*, III, 36, 565-66. All references to Averroes are to *Averrois Cordubensis in Aristotelis De Anima Libros*, ed. F. Crawford (Cambridge, Mass., 1953).

[22]"Lumen est color perspicui secundum actum facti, quando color accipitur: quia lumen secundum veritatem est actus colorum in eo quod colores sunt: et ideo est natura formalis eorum, et cum propria potentia in qua habet fieri hic actus, fit perspicuum necesse est quod omnis color sit participatio luminis in tali vel tali perspicuo" (St. Albert, *De Sens. et Sens.*, II, 1; IX, 39). "Non oportet dicere quod aliquid sit color praeter esse quoddam luminis in perspicuo terminato . . . Et sic ex esse luminis in diverso in perspicuo erit accipere coloris naturam et omnem colorum diversitatem (*ibid.*, 2; IX, 47).

[23]"Lumen est hypostasis colorum secundum esse formale quod est esse simpliciter colorum, sicut supra diximus. Hanc igitur veram putamus esse sententiam de luce et lumine" (*De An.*, II, 3, 12; V, 255-56). This is a common medieval doctrine. See Avicenna, *De Anima* (Venice, 1508), III, 3; f. 11rb. See also St. Thomas, *In I Sent.*, d. 17, q. 1, a. 1; and *In II De Anima*, lect. 14.

St. Albert attributes to Jacob Alkindi (d. 873) the teaching that light is the *species* and *hypostasis* of colors. See St. Albert, *Sum. Theol.*, P. II, q. 77, m. 3, obj. 5; XXXIII, 76. This doctrine, however, is not found in Alkindi's published works. See A. Nagy, "Die philosophischen Abhandlungen des Ja'qub ben Ishaq Al-Kindi," *Beiträge*, II, 5 (1897), 1-64.

sensibles.[13] The phantasy, imagination, and estimative power are also passively acted upon by individual sensible forms.[14]

In the same way the possible intellect receives intelligible forms, becoming their subject.[15] Since it is an immaterial power it is not passive, properly speaking, but simply receptive.[16] Its activation is brought about by the agent intellect.[17]

What we wish to point out primarily in St. Albert's doctrine of the intellect is that the agent intellect acts on the possible intellect in a direct rather than an indirect manner. If the agent intellect were to act on the phantasy so as to produce a universal which in turn activated the possible intellect, the action of the agent intellect on the possible intellect would be indirect. If, on the other hand, the agent intellect were to act *per se* on the possible intellect and not merely by rendering intelligible that which activated the possible intellect, the action of the agent intellect on the possible intellect would be direct. We desire to demonstrate that for St. Albert the latter is the case.

The proof of the direct action of the agent intellect on the possible intellect is four-fold: (1) from the comparison of the agent intellect to light, (2) from the nature of the intellect's knowledge of itself, (3) from the manner in which the intellectual memory functions, (4) from the way in which man knows separated substances.

Proof from the Comparison of the Agent Intellect to Light

The Peripatetics and Scholastics, following Aristotle's lead,[18] regularly compared the agent intellect to light. St. Albert pushed this comparison very far.

In order for a color to be visible, it must be activated or informed by light,[19] which gives it formal being.[20] This does not mean, however, that color and the light informing it are seen by the eye as two distinct things. On the contrary, from the very fact that light and color are related to one another as form and matter, they constitute one visible object.[21]

Another way of expressing the relationship of color to light is to say that color is light with a certain kind of existence or that it is a participation of light. As light exists in different ways in opaque or partly transparent bodies, it gives rise to different kinds of colors.[22] Light is even said to be the substance (*hypostasis*) of color.[23] What-

ever any color has of the nature of color, it has it from light; and whatever comes from any other source is rather a privation of the nature of color than part of its essence.[24] Therefore light contains all colors eminently, and what happens to light when a color is produced is that the light is reduced to one particular color, which it contained virtually within itself all the time. Color is thus merely a limited or weakened light.

St. Albert's teaching on the nature of light and color may be summed up in the following propositions: (*a*) Light is the form of color; (*b*) light and color form one visible object; (*c*) color is light in a certain mode of existence.

[24]"Amplius autem in lumine quod est universalis causa colorum . . . quidquid aliquis color de natura habet coloris, ab ipso habet, et si quid aliud est in ipso, potius est de privatione naturae coloris quam mereatur dici coloris essentia" (St. Albert, *De Int. et Int.*, 1, 1, 4; IX, 482).

[25]"Aristoteles loquitur ibi de intellectu agente prout ipse est formale esse universalis, sicut lumen formale esse est coloris. Omne enim universale suum esse formale habet ab intellectu agente" (*Sum. de Creat.*, P. II, q. 55, a. 3, ad 2; XXXV, 466).

[26]"Intellectus agens . . . per hoc idem quod aliud intelligit active, est intelligibilia [*sic*] in quibus intelligit se ut actum ipsorum" (*ibid.*, a. 6, ad 1; XXXV, 476). See Averroes, *De Anima*, III, 5, 691-97.

[27]"Similiter est in omnibus: plura enim ad speciem unam formata, necesse est quod habeant agens unicum quod formet ea ad speciem illam: est autem omnium intelligibilium secundum quod intelligibilia sunt, sicut est etiam omnium visibilium secundum quod visibilia sunt, species una qua visibilia sunt: oportet igitur quod ipsorum sit agens unum ad speciem illam formandam in eis" (St. Albert, *De An.*, III, 2, 18; V, 364).

[28]Averroes, *De Anima*, III, 36, 559-66 and 591-98.

[29]"Ad id quod juxta hoc quaeritur, scilicet utrum sit [intellectus possibilis] potentia ad duas species simul? Dicendum, quod suscipit speciem agentis, et speciem intelligibilis. Sed illae duae species non sunt nisi actus unius. Species enim agentis est actus speciei intelligibilis, sicut lux est actus coloris" (*Sum. de Creat.*, P. II, q. 57, a. 4, ad quaest.; XXXV, 495).

[30]"Ita etiam est de formis imaginatis et in sensitivis acceptis a lumine intellectus agentis. Et ideo non accipiuntur ab intellectu possibili, nisi separatae sint ab eadem luce quae est actus et perfectio possibilis" (*De Unit. Int.*, cap. 6; IX, 464). "Lux agentis quae est actus possibilis, est actus intelligibilis" (*ibid.*, cap. 7, ad 27; IX, 472). "Lumen quod est actus intellectus agentis, est forma et intellectus possibilis et ejus quod intelligitur" (*De Int. et Int.*, II, 1, 5; IX, 510).

[31]"Ex his autem facile adverti potest, quod duo sunt opera agentis, quorum unum est abstrahere formas intelligibiles, quod nihil aliud est nisi facere eas simplices et universales. Secundum est illuminare possibilem intellectum, sicut lumen se habet ad diaphanum, quod oportet quod species universalis quamdiu est universalis, semper sit in lumine agentis: et ideo quando recipitur in possibili intellectu, oportet quod in lumine agentis recipiatur: et ideo oportet possibilem illuminari lumine intellectus agentis. Similiter autem possibilis dupliciter habet comparationem: comparatur enim ad agentem sicut completus suo, et comparatur ad formas ex phantasiis elicitas sicut motus et formatus ab eis" (*De An.*, III, 2, 19; V, 366). "Et ideo in omnibus [intelligibilibus] accipit continue intellectus possibilis lumen agentis" (*ibid.*, 3, 11; V, 386).

We shall now see that for St. Albert all these properties of light and color have their counterpart in knowledge, when intellection is compared to physical illumination. The agent intellect may be compared to the colorless light of the sun, the intelligible to the color on which the light shines, and the possible intellect to the sense of sight.

Agreeing with Averroes, St. Albert teaches that the agent intellect is the formal being [25] and the act [26] of intelligibles. Where many things are fashioned so as to be of one form, there must be one agent making them to be so. Now, all visible things, insofar as they are visible, have one form of visibility. Similarly all intelligibles, insofar as they are intelligible, have one form of intelligibility. There must therefore be one agent responsible for this.[27] This is the light of the agent intellect.

Following Averroes,[28] St. Albert holds that the intelligible and the light of the agent intellect form one intelligible object.[29] Another manner of stating this is to say that the agent intellect is the form of both the intelligible and the possible intellect.[30] That is, the agent intellect has two functions. It abstracts a universal form, which must be constantly illumined by the agent intellect's light in order to be intelligible; but it also "accompanies" this form into the possible intellect. The possible intellect is then informed not only by the intelligible but *also*, at the same time and in a unity of intelligible object, by the light of the agent intellect itself.[31]

A more precise expression of the relationship between an intelligible and the light of the agent intellect is that an intelligible is the light of the agent intellect seen in a certain way. When color is seen, the light which actualizes it is also seen, because nothing is visible unless it is incorporated in light. Similarly, in all intelligibles what is understood is only the light of the agent intellect. In some intelligibles this light is incorporated in sensible matter; in some, incorporated in imaginable quantity; and in some, not incorporated in anything at all but seen in itself. For one can see light (the *hypostasis*, the substance, of color) as brilliant (in white) or somewhat dimmed or almost extinguished (in black); but what is seen is always light itself. So,

too, whatever intelligible is grasped, what is received is simply the light of the agent intellect.[32]

The reader will have noticed that many of the texts quoted to explain St. Albert's comparison of intellection to physical illumination are taken from works whose authority is not questioned. On the other hand, some belong to his philosophical commentaries, especially *De Anima III* and *De Intellectu et Intelligibili II*. The legitimacy of relying on these will be defended presently.[33] Meanwhile we may sum up as follows St. Albert's position concerning the nature of intellection, noticing to what lengths he has gone in likening it to physical illumination: (*a*) The light of the agent intellect is the form of intelligibles; (*b*) it is also the form of the possible intellect when intellection takes place; (*c*) the intelligible and the light of the agent intellect form one intelligible object; (*d*) the intelligible is the light of the agent intellect in a certain mode of existence.

Since the light of the agent intellect informs the possible intellect

[32]"Et sicut in colore viso videtur lumen quod de potentia coloris facit actu colorem, eo quod nihil aliud agit in visum nisi illud sit terminatum, et quasi sit luce incorporatum: ita in quolibet eo quod intelligitur de omnibus intelligibilibus, non intelligitur nisi lumen intellectus agentis, licet in aliquo intelligatur incorporatum in materia sensibili, et in aliquo intelligatur incorporatum in quantitate imaginabili, et in aliquo intelligatur clarum in esse simplici intellectuali: sicut lumen quod est colorum hypostasis, et in aliquo videtur candens, sicut in albo, et in aliquo submersum, et in aliquo fere exstinctum, sicut in nigro. Patet igitur ex dictis, quod intellectus possibilis in actu effîcitur per lumen intellectus agentis, et quod in omni eo quod intelligit, hoc intelligit" (*De Int. et Int.*, II, 1, 5; IX, 511).

[33]See nn. 64-67.

[34]*Sum. de Creat.*, P. II, q. 55, a. 6, ad quaest. 1; XXXV, 476.

[35]"Dicimus quod sic, eodem modo quod improprie dicimus intellectum agentem intelligere se: hoc enim est intelligere se ut actum possibilis: suum enim intelligere est suum esse, cum semper sit in actu: et hoc est quod sit actus possibilis, sed ille actus non perficit possibilem nisi secundum quid: sicut si lumen per se solum esset in oculo sine colore, tunc esset immutatus oculus ab actu colorum, sed non esset distincta immutatio ad aliquam speciem coloris determinatam. Similiter quando non solum lumen agentis est in possibili, tunc possibilis est in actu indistincto secundum aliquam speciem intelligibilem, et intellectus agens intelligit se ut talem actum semper: et iste motus non excludit motum intelligibilium, eo quod intellectus agens . . . sit actus omnium intelligibilium: sicut etiam motus luminis non excludit motum coloris in oculo, eo quod sit actus ejus" (*ibid.*). "Ut subjectum intelligit se intellectus possibilis: et hoc semper; quia intellectus agens semper est actus intelligibilium, et intellectus possibilis, vel utrorumque" (*ibid.*, ad obj. 1; XXXV, 477). The same doctrine is found in *I Sent.*, d. 3, a. 29, ad 3; XXV, 130-131.

[36]"Oportet quod species universalis semper sit in lumine agentis" (*De An.*, III, 2, 19; V, 366). See n. 3 as a justification for using this text.

[37]"Cum medium conjunctionis possibilis ad agentem sint speculata, oportet ipsa manere, aut extrema dividentur" (*ibid.*, 3, 11; V, 388). This is given as a proof of the existence of an intellectual memory. See n. 5 as a defense for the use of this text.

in addition to producing intelligibles and since what is received in all intelligibles is solely the light of the agent intellect, we may conclude that the agent intellect acts on the possible intellect directly.

Proof from the Nature of the Intellect's Knowledge of Itself

Strictly speaking, the human intellect does not understand itself since it is merely a power of the soul and not the first principle of action. Nevertheless, improperly speaking, the agent and possible intellects may be said to understand themselves.[34] According to St. Albert, the agent intellect always understands itself as the act of the possible intellect. This constant activation, however, perfects the possible intellect only in an incomplete manner. It is as if light were in the eye by itself, without being colored; it would act on the eye but would not be seen distinctly according to a determined color. The light of the agent intellect in the same way can shine by itself in the possible intellect; but when it does so it actuates it only in an indeterminate manner and not in a distinct way as when this light informs an intelligible species. Thus the agent intellect always understands itself as the act, at least the indistinct act, of the possible intellect.

This constant action of the agent intellect on the possible intellect, however, is not incompatible with the action of intelligibles on the same intellect, since the agent intellect is the act of all intelligibles and informs the possible intellect by the same act by which intelligibles inform it. Therefore the possible intellect always understands itself either as the subject of intelligibles informed by the light of the agent intellect or as the subject of the light of the agent intellect alone.[35]

We may conclude from this that according to St. Albert the agent intellect acts on the possible intellect constantly and directly.

Proof from the Manner in Which the Intellectual Memory Functions

In order that man bring to consciousness what is already in his intellectual memory, it is necessary that the intelligible species possessed be re-illumined by the light of the agent intellect.[36] Indeed, the function of the intelligible species is merely to join the possible intellect to the agent intellect;[37] without this union there is no

remembering. Since the possession of intelligible species does not suffice for memory but the action of the agent intellect is further required, it is not just the intelligible species but also the light of the agent intellect which must act directly on the possible intellect.[38]

Proof from the Way in Which Man Knows Separated Substances

Aristotle raised the question [39] whether or not we can know anything immaterial and said that he would consider it later. He did not carry out his promise; but the problem was taken up by commentators, especially Alexander of Aphrodisias, Themistius, Alfarabi, Avempace, Avicenna, and Averroes. St. Albert reviewed the teachings of these men.[40] His chief source for discovering their doctrines was Averroes' *Commentary on the De Anima*,[41] although other texts were also available. St. Albert's treatment followed rather closely that of

[38]Angelic knowledge also requires illumination by an agent intellect of intelligible species already possessed. See *Sum. Theol.*, P. II, q. 14, m. 3, a. 2, part. 1, ad 1; XXXII, 180. Also a. 1, obj. 4; 171.

[39]*De Anima*, III, 7, 431b18-19.

[40]*De An.*, III, 3, 6-11; V, 378-88.

[41]III, 36.

[42]Alexander of Aphrodisias, *De Intellectu*, in G. Théry, *Autour du Décret de 1210: II.—Alexandre d'Aphrodise* (Le Saulchoir: Kain, 1926), p. 79. Averroes, *De Anima*, III, 36, 128-69. St. Albert, *De Anima*, III, 3, 6; V, 378-79.

[43]Averroes, *De Anima*, III, 36, 235-57. St. Albert, *De An.*, III, 3, 7; V, 381.

[44]Alfarabi, *De Intellectu et Intellecto*, in E. Gilson, "Les sources gréco-arabes de l'augustinisme avicennisant," *Archives d'histoire doctrinale et littéraire du moyen âge*, 4 (1929), pp. 115-26, 11. 202-7. Averroes, *De Anima*, III, 36, 180-87. St. Albert, *De An.*, III, 3, 8; V, 381.

[45]Averroes, *De Anima*, III, 36, 185-87; III, 36, 331-34. St. Albert, *De An.*, III, 3, 8; V, 381.

[46]Avicenna, *De Anima* (Venice, 1508), V, 5; f. 25va. See also *Metaphysics* (Venice, 1508), IX, 7; f. 107rA. St. Albert, *De An.*, III, 3, 9; V, 383.

[47]Averroes, *De Anima*, III, 5, 678-83; 36, 617-19; 36, 623-25.

[48]Avicenna, *De Anima*, V, 6; f. 26va.

[49]See n. 42.

[50]See n. 44.

[51]See n. 48.

[52]Averroes, *De Anima*, III, 36, 578-639.

[53]See n. 48.

[54]Averroes, *De Anima*, III, 36, 650-64.

[55]"Nobis videtur quod in hac vita continuatur [*scil.*, intellectus possibilis] cum agente formaliter, et tunc per agentem intelligit separata" (*De An.*, III, 3, 12; V, 390).

[56]"Colligitur enim ex his, quod intellectus agens tribus modis conjungitur nobis, licet in se et secundum essentiam suam sit separatus; a natura enim conjungitur ut potentia et virtus quaedam animae, sed faciendo intellecta speculata conjungitur ut efficiens: et ex his duabus conjunctionibus non est homo perfectus ut operetur opus divinum: tandem conjungitur ut forma" (*ibid.*, III, 3, 11; V, 387).

[57]"Nos autem dissentimus in paucis ab Averroe" (*ibid.*; V, 385).

[58]Averroes, *De Anima*, III, 4, 54-58; 5, 424-26, 5, 556-76; 5, 581-85; 18, 71-76; 19, 62-64.

[59]St. Albert, *De An.*, III, 2, 7; V, 343.

[60]"In causa autem quam inducemus et modo conveniemus in toto cum Averroe" (*ibid.*, III, 3, 11; V, 386).

Averroes, and in the end the Universal Doctor subscribed to the position of the Commentator.

We have no wish to delve into the details of what each of Aristotle's followers said concerning the problem under discussion, or to examine minutely the fidelity with which their statements were reported by Averroes and finally by St. Albert. Such an undertaking would distract us from our primary intention of demonstrating that for St. Albert the action of the agent intellect on the possible intellect is a direct one. We shall merely sum up the opinions of St. Albert's forerunners concerning man's knowledge of separated substances and show how St. Albert, in following Averroes, adopted and furthered the doctrine that the agent intellect acts on the possible intellect directly.

According to Alexander of Aphrodisias,[42] Themistius,[43] Alfarabi,[44] Avempace,[45] Avicenna,[46] and Averroes,[47] man is capable of understanding separated substances. Avicenna, however, taught that this knowledge is possible only in the next life.[48] According to Alexander,[49] Alfarabi,[50] Avicenna,[51] and Averroes,[52] this power of knowing separated substances is acquired after the possible intellect has been perfected by intelligibles. Avicenna held that in this state the agent intellect is joined in a special way to the possible intellect,[53] and Averroes taught that the agent intellect becomes man's form.[54]

The conclusion arrived at by St. Albert is that in this life the possible intellect can be joined to the agent intellect as to its form and can then know separated substances.[55] It is possible for the agent intellect to be joined to man in three ways. First, it is naturally joined to him as a power of his soul. Secondly, when it illumines intelligibles, it is joined to him as the efficient cause of his knowledge. Thirdly, it is joined to him as the form of his possible intellect.[56]

St. Albert realizes that his doctrine is very similar to that of Averroes.[57] It is true that for Averroes the agent intellect and the possible intellect are separated in being from the human soul and are one in number for all men,[58] and of course St. Albert elsewhere combats Averroes vigorously on this point.[59] But what St. Albert is concerned with here is merely man's knowledge of separated substances. He agrees with Averroes that such knowledge is possible. He also agrees with him completely as to the manner in which it comes about.[60] That is, he agrees that the agent intellect becomes the form of

the possible intellect and that this is brought about by the gradual perfection of the possible intellect by the agent intellect acting as efficient cause of intellection. That is why St. Albert can say that he changes nothing in the doctrine of Averroes except the teaching concerning the unicity of the possible and agent intellects.[61]

Having accepted the teaching of Averroes, St. Albert goes a step beyond the Arabian and adds a further clarification as to how the agent intellect becomes the form of the possible intellect. The agent intellect makes what is potentially understood to be actually understood and thus is the efficient cause of intellection. We have seen, however, that in all intelligibles the possible intellect receives the light of the agent intellect.[62] This teaching becomes a key doctrine at this point. When the possible intellect receives more and more the light of the agent intellect, it becomes more and more like the agent intellect. When the possible intellect has received all intelligibles, it has the light of the agent intellect adhering to it as its form. But, since the agent intellect is its own light, the agent intellect itself is now the form of the possible intellect. This composite of the possible intellect and the agent intellect is what was called by the Peripatetics the acquired intellect or divine intellect.[63]

That St. Albert is giving his own opinion in the part of the *De Anima* we are considering is proved by his own words already quoted.[64] Also, at the close of the treatise, he says:

[61]"Nos autem in dictis istis nihil mutamus nisi hoc quod etiam Aristoteles mutasse videtur, quoniam dixit quod in omni natura in qua est patiens, est etiam agens: et ita oportet in anima esse has differentias" (*ibid.*, V, 385-86).

[62]See nn. 31-32.

[63]"Et haec omnia fiunt intellectu agente influente eis intellectualitatem, et faciendo haec intellecta esse intellecta secundum actum intellectus agens conjungitur nobis ut efficiens: et quia in omnibus his influit intellectualitatem et denudationem, sunt omnia sibi similia in hoc quod separata sunt et nuda: et ideo in omnibus his accipit continue intellectus possibilis lumen agentis, et efficitur sibi similior de die in diem: et hoc vocatur a Philosophis moveri ad continuitatem et conjunctionem cum agente intellectu: et sic cum acceperit omnia intellecta, habet lumen agentis in formam sibi adhaerentem: et cum ipse sit lumen suum, eo quod lumen suum essentia sua est, et non extra ipsum, tunc adhaeret intellectus agens possibili sicut forma: et hoc compositum vocatur a Peripateticis intellectus adeptus et divinus" (St. Albert, *De An.*, III, 3, 11; V, 386-87). The word *adeptus* is taken from Alfarabi. See his *De Intellectu et Intellecto*, 11, 202-6.

[64]Nn. 3, 5, 55, 57, 60, 61.

[65]*De An.*, III, 3, 12; V, 390.

[66]"Demonstratio autem dicti vera est, quae nunc est inducta" (*De Int. et Int.*, II, 1, 8; IX, 515).

[67]Nn. 6-7.

[68]See n. 65. See also *De An.*, III, 3, 11; V, 386 and 388. See also *De Int. et Int.*, II, 1, 9-11; IX, 517-20.

[69]Cap. 1 and 6; IX, 437 and 452.

[70]I, 1, 1; IX, 478.

> We have said in that question what seemed [true] to us, for it seems to us that in this life [the possible intellect] is joined to the agent intellect as to its form, and then through the agent intellect understands separated substances.[65]

Moreover, after teaching the same doctrine concerning the acquired intellect in the second book of the *De Intellectu et Intelligibili*, St. Albert says that he has written the truth.[66] This book is also endorsed in a quotation given earlier.[67]

It is clear that St. Albert considers it possible for the agent intellect to become the form of the possible intellect in this life.[68] It is also plain that this information takes place in the natural, and not the supernatural, order. St. Albert has followed the Greek and Arabian philosophers, none of whom mention that they are discussing powers above man's nature. In St. Albert's *De Unitate Intellectus*, where he teaches the doctrine of the acquired intellect, he says that he will discuss only what can be demonstrated syllogistically and that he will speak solely "according to philosophy" and not according to Christian faith.[69] At the beginning of the *De Intellectu et Intelligibili*, he says:

> We shall treat of whatever things seem to demand inquiry here, as much as we shall be able to investigate by demonstration and reason, following the footsteps of our leader.[70]

Since he is speaking "according to philosophy" and basing his doctrine on "demonstration and reason," St. Albert is concerned with the natural properties of the soul, which can be discovered independently of revelation.

From our study of the way in which man knows separated substances, we may once more conclude that St. Albert believed that the agent intellect acts directly on the possible intellect. The intelligibles grasped by the possible intellect are informed by the light of the agent intellect. In receiving the intelligibles gained by abstraction from the material world, the possible intellect continually receives into itself the agent intellect's light. Indeed, it receives the agent intellect itself, because the light of the agent intellect is the agent intellect. Thus abstraction involves direct illumination of the possible intellect by the agent intellect.

In demonstrating that the agent intellect acts on the possible intellect directly we have also discovered that intelligibles are merely the light of the agent intellect seen in a certain way.[71] The reason for this is that the agent intellect is pure intelligibility; as gold is true gold because it is all gold, so the agent intellect is the only thing which is truly intelligible because it consists solely of intelligible being.[72] The agent intellect is like art and has in itself in advance all intelligibles.[73] It is complete in itself and has all perfections, giving them to everything which is perfected in intellectual being.[74] It contains all intelligibles in itself in an undivided simplicity.[75] These statements are made by St. Albert concerning the human agent intellect and not concerning God's intellect, which becomes clear from an attentive reading of the context of each statement.

[71]See n. 32.

[72]"Et est verum quod est ab entitate et forma rei . . . sicut diximus verum aurum; et sic intellectus separatus est solum quod vere intelligibile est et circa verum, quod nihil habet praeter esse intelligibile" (*Sum. de Creat.*, P. II, q. 55, a. 5, ad quaest. 2, ad obj.; XXXV, 474). That *intellectus separatus* means man's agent intellect is clear from the objection itself and from the answer to the *quaest.*

[73]"Hic autem intellectus agens comparatus arti, et est comparatio quae essentialiter convenit ei secundum quod praehabet in seipso omnia intellecta" (*De Int. et Int.*, II, 1, 3; IX, 508).

[74]"Ex his constat intellectum agentem esse perfectum, et supra perfectum, perfectiones omnes habentem et largientem omni ei quod secundum esse intellectuale perficitur" (*ibid.*).

[75]". . . et quod indivisae sunt intelligentiae in ipso [intellectu agente], et quod omnes in ipso sunt sua substantia et vita ex [et?] lux sua" (*ibid.*, IX, 507). *Intelligentiae* has here the meaning of "intelligibles." For this meaning see *Sum. de Creat.*, P. II, q. 60; XXXV, 517.

[76]"Diversitas actionis intellectus agentis non est ex intellectu agente, sed ex phantasmate: et hoc est quod Averroes in commento super tertium de Anima dicit . . . Actio enim intellectus agentis determinatur ad phantasma, et sic determinata movet intellectum possibilem et educit eum in actu: sicut actio luminis determinatur ad colores, et sic determinata visum educit in actum" (*ibid.*, a. 3, ad 14; XXXV, 467-68).

[77]"Quia cum agens sit una et simplex essentia, non potest esse causa distinctarum specierum in speculando: et ideo speculativus est ut instrumentum ejus ad distinguendum intellectum possibilem" (*De An.*, III, 3, 11; V, 387). *Speculativus* here means "intelligible."

[78]See n. 76.

[79]Averroes, *De Anima*, III, 36, 559-66 and 591-98.

[80]*De Nat. et Orig. An.*, I, 7; IX, 394. That the separated intelligence here mentioned is the agent intellect of man and not God's intellect is quite clear from the context, since the chapter in question deals with the agent intellect in man. Moreover, the agent intellect being discussed has been coupled with a possible intellect in the preceding paragraph, and God has no possible intellect (*I Sent.*, d. 36, a. 3, ad 8; XXVI, 211).

[81]"Sic autem informatur intellectus possibilis apud se habens intellectum principiorum ex lumine illo, quo omnia quidem principia unum sunt et simpliciter, secundum quod pendent ex uno lumine intellectus: divisionem tamen habet et compositionem et intellectionem secundum quod lumen id determinatur et diffinitur ad terminos dignitatum" (*De Unit. Int.*, cap. 6; IX, 464).

The question naturally arises why the human intellect needs sense knowledge if the intelligibles received by the possible intellect are already contained in the light of the agent intellect. St. Albert's answer is that the agent intellect contains intelligible forms only in an indeterminate manner and requires phantasms for its determination. As light is determined by colors before acting on the sense of sight, so the agent intellect's light is determined by phantasms before acting on the possible intellect.[76] Unless phantasms differentiated or "broke up" the light of the agent intellect, the possible intellect would receive it without its being determined to one intelligible or the other, and the possible intellect would not know things.[77] This explanation of the necessity of phantasms for intellectual knowledge is attributed by St. Albert to Averroes,[78] although it is contained only implicitly in the Commentator's teaching.[79]

The Albertine position is that the agent intellect is a "super-intelligible" which is too bright for the possible intellect and gives a knowledge which is too concentrated. In order to be fully intelligible it must be "broken up." It is a light which contains all intelligibles eminently; that is, actually but implicitly, in an undivided simplicity. The function of phantasms is merely to "distinguish" this light. Consequently the content of knowledge can be said to come from the agent intellect itself. St. Albert declares explicitly:

> This is what many say and few understand, that all intelligibles flow into the soul from a separated intelligence [*scil.*, the agent intellect] and not from the things of which the intelligibles are the quiddities and forms.[80]

The first principles of knowledge, for example, are a unity, an indistinct simplicity, in the agent intellect's light. It is only when this light is *determined* and *delineated* by the terms of the first principles that it receives division and composition, and can thus be explicitly understood.[81]

In teaching that the agent intellect acts on the possible intellect directly and that phantasms are necessary merely to limit the agent intellect's light, St. Albert has carefully avoided accepting the position of Avicenna. Avicenna held that the possible intellect, when consid-

ering phantasms, is illumined by the agent intellect directly, receiving from it intelligible forms.[82] St. Albert's criticism of Avicenna is that, for the latter, phantasms are in no way necessary for intellectual knowledge. Since the forms of such knowledge are received solely from the agent intellect, the intellect gets no help whatever from the senses.[83]

St. Albert's doctrine resembles Avicenna's in this, that the agent intellect contains within itself all intelligibles. But it differs from it also, because it teaches that the agent intellect contains these intelligibles in an undivided simplicity and not as actually distinct. As a result, for St. Albert phantasms have a real function to perform and are absolutely necessary for intellectual knowledge.

We may now summarize our demonstration that the doctrine of St. Albert the Great concerning the nature of the human intellect is different from that of St. Thomas Aquinas and substantially the same as that of Averroes. Though St. Albert agrees with St. Thomas that the external senses, internal senses, and possible intellect are passive powers, he disagrees with him concerning the manner in which the agent intellect acts on the possible intellect. For St. Thomas this action is indirect; [84] for St. Albert it is direct.

St. Albert borrowed this doctrine from Averroes but also further developed it. Averroes held: (*a*) that the agent intellect directly perfects and illumines the possible intellect; [85] (*b*) that the agent intellect and the intelligible constitute one intelligible object; [86] (*c*) that the agent intellect can become man's form after the possible intellect has been perfected by intelligibles; [87] (*d*) (implicitly) that the role of intelligible species is merely to differentiate the agent intellect's light.[88] St. Albert accepted all of these teachings and added: (*a*) that an intelligible is simply the light of the agent intellect seen in a certain way; (*b*) that the agent intellect contains in itself

[82]*De Anima*, V, 5-6; f. 25rb-va.

[83]"Si intellectus agens est intelligentia habens formas, ut dicunt, aut easdem quas habet, ponit in intellectu possibili, aut alias. Si easdem, tunc species quae sunt in anima, non abstrahuntur a rebus extra, et sic a sensibus in nullo juvatur intellectus possibilis" (*Sum. de Creat.*, P. II, q. 55, a. 3, sed contra 6; XXXV, 465).

[84]"Et si quis recte consideret, intellectus agens, secundum ea quae Philosophus de ipso tradit, non est activum respectu intellectus possibilis directe; sed magis respectu phantasmatum, quae facit intelligibilia actu, per quae intellectus possibilis reducitur in actum" (*Quaest, Disp. de An.*, a. 18, ad 11).

[85]See n. 26.

[86]See n. 28.

[87]See nn. 52, 54.

[88]See n. 79.

all intelligibles in an undivided simplicity; (*c*) (explicitly) that the role of intelligible species is merely to differentiate the agent intellect's light; (*d*) that the agent intellect *is* its light (thus explaining *how* the agent intellect can become the form of the possible intellect). It can be seen that even the specifically Albertine notions which are added to the Averroistic ideas are but developments of the latter.

Philosophical Sociology

WALTER J. ONG, S.J., *Saint Louis University*

The number of contemporary philosophers who have kept their philosophic interests free from what Husserl calls concern with the human life-world is becoming smaller and smaller. As John Wild has recently reported in the *Philosophical Review* (LXVII [Oct., 1958], 460-76), the living thinkers of Continental Western Europe are almost all concerned with man in his concrete, full *Lebenswelt*. They have progressed beyond a critique of the limitations of abstraction and are seriously engaged in making up for these limitations as far as possible. In the English-speaking world, firsthand concern with the human life-world is less marked, both among logical positivists and among their more strenuous adversaries; but interest in the subject at secondhand is growing by leaps and bounds as reports from the Continent pour in.

Western philosophy is thus acquiring a range and freedom of movement somewhat like that which it had in the past before the explosive developments of thought from the seventeenth century to the present blew apart the old field of "natural philosophy" into reciprocally intolerant areas. However, the new range and freedom of movement is unlike the old in being concentrated on man, frequently on the human person as such rather than on a world of mere objects, or even on man as an object.

The world of Eugen Rosenstock-Huessy belongs to this line of philosophical development; and, with the appearance of the second and concluding volume of his *Soziologie*, the massive book *Die Vollzahl der Zeiten*,[1] it becomes manifest that his entire life's work merits more attention than it has so far received. Such attention is now encouraged by the appearance also of a collection of his articles and addresses over the last eight years, *Das Geheimnis der Universität*, with a subtitle advertising that these were directed "against the decay of the time-sense and of the power of speech."[2] This volume contains

[1]Stuttgart: W. Kohlhammer, 1958 (774 pp.). Volume I, *Die Übermacht der Räume* (Stuttgart, Kohlhammer), had appeared in 1956 (335 pp.).

[2]*Das Geheimnis der Universität: wider den Verfall von Zeitsinn und Sprachkraft.* Aufsätze und Reden aus den Jahren 1950 bis 1957 herausgegeben und eingeleitet von Georg Müller, mit einem Beitrag von Kurt Ballerstedt: "Leben und Werk Eugen Rosenstock-Huessys" (Stuttgart: W. Kohlhammer, 1958), 320 pp.

a brief life of Rosenstock-Huessy and a bibliography of his writings, most of which are in German, though some are in English. Having taught law and sociology in his native Germany and theology at Harvard before he became, in 1935, Professor of Social Philosophy at Dartmouth College, where he is now emeritus, Rosenstock-Huessy has lived his life in the penumbra of phenomenological and "existentialist" developments. It would seen inaccurate to view his work as resulting from the "influence" of the standard phenomenological and personalist figures, Husserl, Heidegger, Jaspers, Lavelle, Marcel, Denis de Rougemont, or even Buber and Franz Rosenzweig. He breathed the same air as these men, sensed many of the same questions; but one feels that he has made his own distinctive contributions to the climate of ideas

These contributions are suggested in the title of his last two volumes, *Soziologie*. At one point, not far perhaps from the point at which it is tangent to psychoanalysis, phenomenological analysis opens into a sociology, since it finds the human person, for all his interiority, situated within society and thus sees the organization of society as the complement of the interior consciousness and interior resources of the individual. Here is the field in which Rosenstock-Huessy works, where his devotion to the unity of the social sciences (history included), theology, and language finds its outlet. His view of man and of reality is based on his profound awareness of psychological processes and of their historical grounding, and ultimately on his keen apprehension of the fact that all human concepts are formed within history, that in learning to form concepts every man is from infancy coached by the culture into which he is born. World views and philosophies are the coefficients of cultures and languages, not in the sense that we must despair of finding one which is true but in the sense that all concepts and insights and judgments, even when entirely true, involve some specialization; and the precise specialization which is resorted to in any one case is determined, at least in part, by a culture and a corresponding set of linguistic practices. The fact that these cultures can reach out to embrace one another saves us, of course, from the charge of facile "relativism." The specialized views can be made to interpenetrate—but not in abstraction. One cannot learn to form concepts without assimilating particular cultures. To know what "laboring man" means to an American, a Frenchman has in one way or another to learn to participate in the history of the United States; and to learn what *ouvrier* (applied to persons who are only somewhat the same as the American "laboring man") means to a Frenchman, an American must become in some sort a partaker of French history.

Although he follows phenomenological trends in reflecting on psycho-

logical processes, Rosenstock-Huessy examines these processes not within the horizon of the individual self alone but through their development in social, linguistic, and conceptual history. Louis Lavelle has skillfully and patiently illuminated the effects of speech and writing in the individual life, assessing the psychological import of transactions conducted in one or the other medium. Rosenstock-Huessy is fully aware of the different psychological values of the media; but he is also interested in the historical, sociological causes for the emergence of writing, in the differences between an oral and a manuscript culture, and in the significance of the change from the one to the other in the forward-moving trajectory of history. This forward movement is an essential part of his vision; and it brings him to situate psychological phenomena themselves not merely in the individual self but in the real cosmos—which means, of course, the cosmos as influenced by Christianity, which has actually provided the vision of a cosmos in eschatological time; that is, in forward movement.

In the two volumes of *Soziologie* Rosenstock-Huessy produces a most unorthodox and philosophical treatment of this subject. First considering the significance of the emergence of sociology as a focus of human attention in this particular age of cosmic history, he goes on, more or less in the tradition of Continental sociology generally, to break down sociological phenomena in terms which demand philosophical handling. These are most often dialectical terms, dyads played against one another to generate meaning by contrast: sport and struggle, companionship and authority, art and love, children's speech and mother-tongues (what does "mother-tongue" say that "father-tongue" would not say?), disputation and philosophy, grammar and logic, and so on. Without discarding the results of "objective" sociological studies, this kind of treatment cuts back of such studies to their suppositions and the historical matrix in which they, too, have been formed.

One returns here from a world of "observation" and measurement to an older world of gnomic expressions and chthonic wisdom. Rosenstock-Huessy's "conclusions" tend to be of the nature of apothegms—not apothegms uttered in a vacuum but brought to bear on particular developments in culture and thought. A typical judgment from *Die Vollzahl der Zeiten*, at a moment when he is touching on the thought of Friedrich Hölderlin and Père Pierre Teilhard de Chardin, S.J., is the following: "From this we draw the important conclusion: experiences of the first order, of the first rank, are not realized through the eye." [3] But if his is a kind of proverbial wisdom, it is a highly informed and sophisticated one—much more so than other such wisdoms in the past because it is generated out of,

[3] "Daraus ziehen wir den wichtigen Schluss: Erfahrungen ersten Grades, ersten Ranges, werden nicht durch das Auge gemacht" (*Die Vollzahl der Zeiten*, p. 33).

and brought to bear on, a mass of particular detail inaccessible to earlier ages. The detail gives gnomic pronouncement tremendous range. On the basis of an utterance such as the foregoing, it becomes possible to conduct a careful scrutiny of the entire modern enterprise of "framing" knowledge in visualist fashion, through charts and tables at one level, and at another through fixing attention on "objects" and even treating human beings as though they were objects (a necessary tactic, but one entailing definite disabilities). The titles of the two volumes of *Soziologie* have themselves a gnomic ring: *The Conquering Power of Space* and *The Full Count of the Ages* (this seems a more adequate rendering of the German than the more familiar English *The Fullness of Time*). As titles, however, they are perhaps a little contrived in that they suggest a compactness of organization which the leaping progression of thought in the volumes sometimes belies.

Rosenstock-Huessy's thought involves ultimately a kind of theology. Protestantism, he insists in a letter after the 1954 Evanston ecumenical meeting, did not make all the laity into priests, as some have thought, but simply into theologians. Even when one does not agree with his theological nuances or interpretations—and it is not too often that one does not—his thought is invariably seminal and its very movement stimulating. These volumes, like the other works of Rosenstock-Huessy, are difficult to classify. And this is as it should be, for a dissatisfaction with all classification because of the disability it unavoidably entails is a mark not only of Rosenstock-Huessy's thought but of contemporary philosophy generally. If it is true, as those who are intelligently ill at ease in the presence of classification well know, that we can never avoid it, however industriously we may conceal it, it is also true that man can never again be so smug about classifying things as he rather consistently has been in the past. Philosophy today is spilling out of its old containers, not shrinking but growing, developing a social dimension and cast which is personalist and even poetic and literary. Under these circumstances, it is hard to see how the practicing philosopher can fail to pay attention to Rosenstock-Huessy's work.

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The Logical Problem of Induction. **By Georg Henrik von Wright. 2nd rev. ed. Oxford: Basil Blackwell; New York: Macmillan Co., 1957. Pp. xii + 249.**

As a rule, induction is treated as a concept in close conjunction with at least one, and very likely all, of the following: universal, probability, deduction, causality, prediction. "The problem of Hume"—by which Professor von Wright means just *one* of the problems of that philosopher, but at any rate the one arising out of Hume's formulation of his experimental method of reasoning—this problem is taken in the book under review to be that of justifying induction. We begin, in other words, with the supposition that inductive knowledge is possible; and then, by examining the linguistic devices in which such knowledge is set out, we show whether, and in what sense, our language forms can give it good foundation. Yet von Wright's own conclusion is quite negative, much as was Hume's:

> It is impossible [that is, it is self-contradicting] to guarantee, with certainty or with probability that an unknown instance of the property A will also exhibit the property B, if A and B are different properties (p. 178).

This is the net result. To reach it, the author examines a number of constructive proposals, familiar in the history of philosophy, which by and large make the error, he thinks, of joining questions of fact somehow to questions of language. In the past, philosophers have ordinarily asked for justifications of induction in ways they have rarely asked for when they talk about deduction—principles of uniformity and necessity in nature, and the like. These justifications are themselves either inductive, or they are not. If inductive, our reasoning is circular; if not inductive, the reasoning seems to be *ad hoc*, gratuitous. Only if we are made to realize that no justification can be allowed to retain either of these faults (faults which arise mainly from the notion that the world reflects speech forms or that likenesses in speech are the same as likenesses in things) can we come to grips with what inductive necessity should look like. Von Wright examines, among other views, conventionalism, pragmaticism, the probability-interpretation of induction, the doctrines of Mill, Kant, Fries; and if he is critical of all their results he is at least hopeful that he has cleared the underbrush again

and that philosophy can proceed anew. What philosophy is to do, after eight or ten of the most comprehensive and persuasive theories have been demolished, the author does not say. In other books, he has gone further in providing an answer.

The Logical Problem of Induction is an early work, a doctoral thesis, but an extremely good one. This revision brings the notes and bibliography up to date, and affords opportunity for a recasting of many sections, indeed whole chapters. There is no space in the present little review to discuss the objections to the doctrine that come to mind; and I shall have to be content to remark that despite differences of opinion I feel that in the independence, conciseness, and baldness of his book one finds a counterpart to other works associated with Helsinki—I mean, for instance, that most lucid, if least popular, *Symphony No. 4* of Jan Sibelius.

CORNELIUS RYAN FAY, *Notre Dame College of Staten Island*

The Elements of Logic. **By Vincent Edward Smith. Milwaukee: Bruce Pub. Co., 1957. Pp. ix + 298.**

Well-known Scholastics teaching in the best known institutions write textbooks that—more often than not, somehow—are poor. Perhaps it is because they are so used to writing for their fellow professionals. Mr. Vincent Smith is an exception. Though he has written many professional books and articles, his text here is brilliantly simple and eminently teachable.

The students' attention is engaged in a novel way, through case histories. Logical principles are brought out against the background of the original words of important arguments in the history of Western thought. Going all the way back to the pre-Socratics, two hundred and eighty-four case histories are given the student. When Hume's opening argument against the possibility of miracles is shown to contain an illicit process in the major term, the student who might be indifferent to pure logical theory is made to feel its relevance. In the atmosphere of an open intellectual market the student sees case after case of the power of traditional logic and the Scholasticism that grew up around it to criticize competing systems and to withstand criticism from them.

The book makes no pretense at being an exhaustive treatise. There are happy simplifications. Mr. Smith, for instance, reduces the number of rules for the syllogism to five, and he does not go into the moods at all. The thirty-five chapters are all brief, but they are as good as they are short. The discussion of concepts is simultaneously a defense of moderate realism,

a proof that concepts and ideas are natural signs, and a *reductio ad absurdum* of the notion that words could have only extension. Good quotations from Rousseau and Locke are enlisted against Berkeley's own statement of his nominalism.

The discussion of induction, though it is very simple, seems to me to be a positive contribution to Scholasticism in ordering and clarifying our general, if slightly ill-stated, position. So far as I know, Mr. Smith is the first person to use the term "abstractive" induction. He distinguishes between abstractive and enumerative induction, dividing the latter into complete and incomplete; for example, "The twelve Apostles were Jews," and "Water freezes at 32 degrees." In penetrating exposition the student is made to see that enumerative induction could not be the only type of induction, that, in fact, it itself requires abstractive induction—for example, the mind must first establish what Jews are, "Jews are people who . . ." In this abstractive induction "the strength of the conclusion does not depend intrinsically on the number of cases examined." True, the idea that the whole is greater than its part *does* depend on experience but only to the extent of getting us to understand the meaning of the subject and the predicate. When Hume and Kant say that we could not know that everything must have a cause unless we experienced everything, they are asserting implicitly (and gratuitously) that enumerative induction is the only type of induction.

In discussing the difference between dialectic and demonstration, Mr. Smith shows that dialectic is the ordinary tool for determining the relevance of material used in induction. Hence Mill's canons taken alone would be valueless. Our theories in science, for example, "are not themselves the product of induction but of preinductive dialectic."

A brief survey of symbolic logic in two chapters gives the student enough of the symbols to demonstrate in principle the strengths and the weaknesses of the propositional calculus. Complicated hypothetical arguments can be handled more easily. The Aristotelean syllogism cannot prove that "if Dad is taller than Mom, and if Mom is taller than the baby, then Dad is taller than the baby." We come out with four terms. Mr. Smith also shows the weaknesses in symbolic logic, the weakness, for instance, in ignoring causal connections in propositions. In symbolic logic if the consequent (q) is true, then the implicative truth function "if p then q" is true whether or not the antecedent (p) is true. To take an example, bears are protected from the cold if they have fur, an example of material implication. According to symbolic logic, then, if bears are protected from the cold, both of the following propositions are true simultaneously: (*a*) If bears have fur they are protected from the cold; (*b*) If bears do not have

fur they are protected from the cold. This is the paradox of material implication.

Many more than the usual proportion of my students became persuaded of the earthy usefulness of knowing the logic of the four basic types of discourse: demonstrative, dialectical, rhetorical, and literary. In past years I found that they had greater difficulty and less interest. Congratulations to Mr. Smith and the publisher for giving us this book.

THOMAS LANGAN, *Saint Louis University*

Aesthetics. **By Edward Bullough. Ed. with an introd. by Elizabeth M. Wilkinson. Stanford: Stanford Univ. Press, 1957. Pp. vii + 158.**

These three lucid essays of about World War I vintage were written by the first lecturer on aesthetics at Cambridge. The late Edward Bullough (d. 1934) was by vocation a linguist, although art and aesthetics fascinated him as much as language and literature. Clarity and good sense but little profundity characterize these lectures; and, although they move in an atmosphere of psychologism characteristic of the time, they avoid its worst excesses, thanks to Bullough's conviction that the reality of the aesthetic experience is centered about its transcendence. On the other hand, they are neither critical nor systematic enough to earn consideration as pioneer efforts in a genuine phenomenology of aesthetic experience.

The second essay, " 'Psychical Distance' as a Factor in Art and an Aesthetic Principle," being the most original contribution, provides the best gauge of Bullough as a philosopher of aesthetics. In an aesthetic experience the object must be capable of making an appeal, not to mere pleasure or any other selfish or practical need or end but essentially to man's contemplative powers; this does not keep it from engaging the entire person, and feelings perhaps even more than intellect. "It is distance which makes the aesthetic object 'an end in itself.' " Distance explains, too, how an art object, while remaining fully concrete in being and appeal, can take on the allure of a universally valid truth; distance is the secret of its paradoxical capacity to be for no one and for everyone. It is also what makes the art object transcend distinctions of "objectivity and subjectivity"; for the "distance" is the selfless detachment of the artist, which gives an essentially personal and subjective art production that objective character capable of making a direct appeal to the selflessness of many foreign subjectivities. Throughout this brief exploration of a notion that certainly touches the essence of the aesthetic experience very centrally, Bullough never strays from the path of an unshakeable common sense; nor,

on the other hand, does he plunge very deeply into the problems of the constitution of the aesthetic object that alone could give this analysis some extensive explicit philosophical significance.

The longer first essay, "The Modern Conception of Aesthetics," contains efficient and economical criticisms of the major conceptions prevalent in 1907 of what aesthetics is supposed to be. Bullough points to the emptiness of metaphysical definitions of beauty and to the unrealistic denial of common experience perpetrated by an explanation that would reduce aesthetic experience to mere feeling. In explaining what the study of aesthetics is supposed to accomplish, Bullough is careful to distinguish it from art criticism or from the effort to develop rules for artists. Aesthetics, rather, has the task of describing the experience of beauty. Because of the great variety of manifestations of beauty between, and even within, the different art forms, the approach to describing beauty cannot be an abstract one. Bullough even goes so far as to assert that, viewed objectively, beauty cannot be contained in a single abstract structure because the appeal of the beauty of each lovely thing lies precisely in its distinctiveness. Yet aesthetics must find in the rich multiplicity of aesthetic experiences that which is common to them all. This can be done without betraying a single facet of this rich reality, by viewing it *as experience*, making it possible to subsume

> all of the modifications of the beautiful under the general conception of the aesthetic—not because all of these effects are alike, but because they contain, though in various degrees and combinations, the main features of the essence of aesthetic effect in general.

In this way, the time-worn arguments that arose from admitting both clarity and obscurity, smallness and vastness, elegance and suddenness, and so on, as objective characteristics of the beautiful can be avoided, for all are in fact facets of aesthetics *experience*.

The third essay, "Mind and Medium in Art," is less aptly chosen to stand by itself, since it is a mixtum-gatherum of remarks in reply to a symposium. It does contain some valuable suggestions concerning the artist's ability to "translate" a common experience into the lines or the words or other symbols that are precisely capable of communicating aesthetically—concretely and symbolically—this reality to others.

In editing these essays Elizabeth Wilkinson has made us regret that Edward Bullough has left behind no major treatise in aesthetic philosophy.

BIBLIOGRAPHY OF CURRENT PHILOSOPHICAL WORKS PUBLISHED IN NORTH AMERICA

For the purposes of this bibliography, "philosophy" will be understood in a very broad sense. It will include works in other fields—such as sociology, aesthetics, and politics—that involve philosophical principles and problems.

"Current" books will be understood to include new books, revised editions, and reprints if the previous printing had been out of stock for a notable period of time, or if there is a notable difference in price, format, and the like.

"Publication in North America" will be understood to refer not only to works originally published in that area, but also to works originally published in some other country and simultaneously or subsequently issued by some North American publisher under his own imprint. In the latter case (if it is known), the book will be marked by the symbol ‡ in the left hand margin.

The procedure is as follows:

1. *Books announced for publication will be listed in the issue which next appears after the announcement is received.*
2. *Books actually published will be listed in the subsequent issue, even though they were already listed in accordance with No. 1 above.*
3. *Books received by* The Modern Schoolman *will be listed with full bibliographical information and a descriptive and/or critical note in the subsequent issue, even though they were already listed in accordance with No. 1 and/or No. 2. This will be done even if a full review is to appear later.*

Abélard, Peter. *The Story of My Misfortunes.* Glencoe: Free Press, 1959. $3.50.

Abernethy, George L. *The Idea of Equality.* Richmond, Va.: John Knox Press, 1959. Pp. 351. $6.00.

Adler, Alfred. *Understanding Human Nature.* Greenwich, Conn.: Fawcett Pubns., Inc.; September, 1959. 50¢

Aiken, Alfred. *Lectures on Reality.* New York: Hillier Press, 1959. Pp. 251. $5.50.

Aldridge, Alfred Owen. *Man of Reason; The Life of Thomas Paine.* Philadelphia: Lippincott, 1959. Pp. 348. $6.00.

Allen, G. F. *Buddha's Philosophy.* New York: Macmillan Co.; June, 1959. $4.75.

Alves, Joseph T. *Confidentiality in Social Work.* Washington, D.C.: Catholic Univ. of America Press, 1959. Pp. xvi + 268. Paper, $3.00.
This is a dissertation presented to the Catholic University of America. The author examines the principle of confidentiality in social work from three points of view: (1) principles of the natural law, (2) prescriptions of civil law, and (3) social work theory (including codes of professional ethics) and practice (including questionnaire studies of social caseworkers).

A Modern Introduction to Ethics. Ed. Milton K. Munitz. Glencoe: Free Press, 1959. $7.50.

Arendt, Hannah. *The Human Condition.* Garden City: Doubleday & Co., 1959. Pp. 394. Paper, $1.45.

[Aristotle.] *Philosophy of Aristotle.* Lincoln: Nebraska Book Co., 1959.

———. *Politics and the Athenian Constitution.* Ed. and trans. by John Warrington. New York: Dutton & Co.; June, 1959. $1.85.

Asoka, King of Magadha. *The Edicts of Asoka.* Ed. and trans. by N. A. Nikam and Richard McKeon. Chicago: Univ. of Chicago Press, 1959. Pp. 95. $1.75.

Augustine, St. *Nine Sermons of Saint Augustine on the Psalms.* New York: P. J. Kenedy & Sons, 1959. Pp. xi + 177. $3.50.

These sermons illustrate St. Augustine's way of preaching on the Psalms; none of them touch, except in passing, on philosophical topics. The introduction is good, and could be helpful outside the particular application to this volume. The translation is very free and colloquial; the translator argues that St. Augustine's Latin was equally colloquial, but the comparison does not seem altogether valid.

[Avicenna.] *Avicenna's 'De Anima.'* Ed. F. Rahman. New York: Oxford Univ. Press, 1959. Pp. 311. $10.10.

Bahm, Archie John. *Philosophy of the Buddha.* New York: Harper & Bros., 1958. Pp. 175. $3.00.

Baillie, John. *Our Knowledge of God.* New York: Chas. Scribner's Sons, 1959. Pp. 263. $4.00.

Barker, Sir Ernest. *The Political Thought of Plato and Aristotle.* New York: Russell & Russell, 1959. Pp. 581. $7.50.

Barzun, Jacques Martin. *The House of Intellect.* New York: Harper & Bros., 1959. Pp. 284. $5.00.

Bastien, Hermas. *Philosophies et philosophes américains.* Montréal: Les Frères des Ecoles Chrétiennes; Mar., 1959. Pp. 260. $8.00.

Battestin, Martin C. *The Moral Basis of Fielding's Art.* Middletown, Conn.: Wesleyan Univ. Press, 1959. Pp. 207. $4.50.

Beck, Stanley D. *The Simplicity of Science.* Garden City, Doubleday & Co. Pp. 212. $3.75.

Becker, Carl Lotus. *The Heavenly City of the Eighteenth-Century Philosophers.* New Haven: Yale Univ. Press, 1959. Pp. 168. Paper, 95¢

Bell, P. R. (ed.) *Darwin's Biological Work.* New York: Cambridge Univ. Press, 1959. Pp. 352. $7.00.

Bellak, Leopold, and others. *Conceptual and Methodological Problems in Psychoanalysis.* New York: New York Academy of Sciences, 1959. Pp. 163. Paper, $2.75.

Bergler, Edmund. *Principles of Self-Damage.* New York: Philosophical Lib., 1959. Pp. xii + 469. $6.00.

In a number of earlier works, this well-known author has propounded the theory of a "psychic masochism," a mechanism of "finding pleasure in displeasure." This volume recapitulates the theory and presents much new clinical evidence. The conclusion that some people find pleasure in self-inflicted torture seems warranted. But by means of extrinsic analogies the theory is extended to all human beings. Some psychiatrists seem to maintain that there are no sane people, but only more and less insane ones; the present author makes sanity, or "normality," seem an improbable accident, a compromise not only unexpected but inexplicable, a departure from the nature with which the child is born. Yet many discussions and analyzes presented in the book are entirely in harmony with common sense evaluations.

Bergson, Henri. *Matter and Memory.* Garden City: Doubleday & Co., 1959. 95¢

[Berkeley.] *Philosophy of Berkeley.* Lincoln: Nebraska Book Co., 1959.

Berkeley, Edmund C. *Symbolic Logic and Intelligent Machines.* New York: Reinhold Pub. Co., 1959. Pp. 208. $6.50.

‡ Bevan, Edwyn. *Stoics and Sceptics.* New York: Barnes & Noble, 1959. Pp. 152. $4.50.

This work, first published in 1913, is one of the best brief accounts, and its British and American publishers are to be congratulated on making it available to a new generation of students. For a reprint it seems rather expensive.

Bindra, Dalbir. *Motivation.* New York: Ronald Press, 1959. Pp. 368. $5.50

Biot, René. *What Is Life?* Trans. from the French by Eric Earnshaw Smith. New York: Hawthorn Books, 1959. Pp. 92. $2.95.

Black, Max. *The Nature of Mathematics.* Paterson, N.J.: Littlefield, Adams, 1959. Pp. 233. Paper, $1.50.

Boas, George. *The Inquiring Mind.* La Salle, Ill.: Open Court Pub. Co., 1959. Pp. 439. $4.50.

Bonner, Hubert. *Group Dynamics.* New York: Ronald Press, 1959. Pp. 539. $6.50.

Bordeaux, Henry. *Edith Stein.* Trans. Don and Idella Callagher. Milwaukee: Bruce Pub. Co; September, 1959. $3.95.

Boyer, Carl B. *History of the Calculus and Its Conceptual Development.* New York: Dover Pubns.; June, 1959. $2.00.

Brady, Ignatius, o.f.m. *A History of Ancient Philosophy.* Milwaukee: Bruce Pub. Co., 1959. Pp. xi + 261. $5.00.

This is an introductory textbook in the history of ancient philosophy, intended to be the first volume of a three-volume series sponsored by the Franciscan Institute of St. Bonaventure University. It contains a somewhat unusual division of matter. It begins with ancient Oriental philosophy, takes up Greek and Roman philosophy to the end of the Neoplatonic period, and concludes with a treatment of Oriental Scholasticism to Averroes. The text is provided with footnote references, and there is in addition a bibliography of source materials and readings. There are three indices: of philosophers treated, of historians, and of philosophical doctrines.

The text is well written and printed with an eye to the student's needs (in the use of bold face headings, larger and smaller type, and so on); the pages are printed in double columns. It might be somewhat brief for some purposes, but it will probably be found excellently suited for many purposes.

Brain, Sir Walter Russell. *Science, Philosophy and Religion.* New York: Cambridge Univ. Press, 1959. Pp. 33. Pamphlet, 90¢

‡ ———. *The Nature of Experience.* New York: Oxford Univ. Press, 1959. Pp. 75. $2.00.

Brandt, Richard Booker. *Ethical Theory.* Englewood Cliffs, Prentice-Hall. Pp. 514. $6.75.

Brecht, Arnold. *Political Theory.* Princeton: Princeton Univ. Press, 1959. Pp. 603. $12.00.

Bridgman, P. W. *The Way Things Are.* Cambridge: Harvard Univ. Press, 1959. Pp. x + 333. $5.75.

Already known for his contribution to the philosophy of science, the author here extends his consideration to cover other fields as well. The book begins with several chapters on method. In principle agreeing with the method of philosophical analysis, he describes philosophy as a predominantly verbal activity, as talking about the way we talk about things. He also generalizes his notion of "operation." In his consideration of the physical sciences, he insists on the necessary connection between the instrument of knowledge and what

is known; he also discusses some particular problems, such as velocity, state of a system, particles, empty space. Some of these special analyses are very sharp. In dealing with psychology, the author insists on the radical difference between the world of introspection and the world of external experience. Yet his straightforward acceptance of conscious experience is combined with the view that consciousness is a function of the brain, or perhaps of the nervous system as a whole, in exactly the same way that any other operation is a function of matter and structure. "May consciousness be merely certain aspects of this complex self-relationship, i.e., the relation of any system to itself, *seen from the inside*?" (p. 208). In dealing with the social sciences, the author insists on the primacy of the individual over society, yet does not flinch before the notion of control through education and even cerebral stimulation. He has some good common-sense things to say about law, military service, the advantages of minimum codes.

Throughout, the author insists that science (or any other kind of thinking) is the activity of some individual, that proof must be seen by someone, and that it is not present to a public mind or existing in a vacuum. The thesis of the personal or "private" factors in all knowledge is carried by the author to the extent of saying that we can never get away from ourselves and that thus we never know things as they are but only as they manage to affect ourselves and in particular our nervous systems (a fine example of defining intellection as if it were sensation). This limitation, combined with an exaggerated, one-sided view of meaning (the thesis that operational definitions constitute the only meanings), leads the author to a monism of knowledge after the manner of Hume.

Brinton, Crane. *A History of Western Morals.* New York: Harcourt, Brace & Co., 1959. Pp. 512. $7.50.

Broad, Charlie Dunbar, *Five Types of Ethical Theory.* Paterson, N.J.: Littlefield, Adams, 1959. Pp. 313. Paper. $1.75.

Brown, Norman O. *Life against Death.* Middletown, Conn.; Wesleyan Univ. Press. Pp. 366. $6.50.

Bunge, Mario. *Causality.* Cambridge: Harvard Univ. Press, 1959. Pp. 380. $7.50.

This is a study of the causal principle and its place in modern science. The scope of the investigation is broad and covers many areas. In general, by "cause" the author understands "efficient cause." The burden of the book is twofold. On the one hand, it takes a frankly realistic position on the ontological status of causation; on the other, it attacks the doctrine that causality is the sole species of determinism.

The book has four parts. The first part is concerned with the meanings of the terms "causation," "causality," "determination," and "determinism." In this part, there are also discussions of chance and principles of lawfulness and determinacy; it concludes with a study of the formulations of the causal principle. The second part treats of "what causal determinism does not assert." Here the author examines the empiricist criticism of causality as well as the "romantic" view (interconnectedness of all); he also considers fatalism and mechanism. In the third part, he treats of the positive assertion of causality, stating that it is linear, involves artificial isolation, requires either a first cause or an infinite regress, is unidirectional, requires the summation of causes, is external, denies spontaneity, requires the distinction between substance and attribute, and denies all real novelty. In the fourth part, he presents his own

views, discussing cause, reason, the principle of sufficient reason, scientific law, explanation in science, prediction, and certainty. He concludes that the causal principle has a place but must be supplemented with other types of determination.

There are many excellent things in this study. The chief difficulty is that the opinions of other thinkers, often cited and criticized, are often enough understood in terms of the author's own definitions. For example, Aristotle is made to uphold the theory that all determination comes from efficient causes; the "scholastics" are made to say that all material things are totally passive; the "potency" involved in change is said to be "pre-existent" and to imply that nothing new ever happens since it pre-existed in potency.

———. *Metascientific Queries.* Springfield, Ill.: Charles C Thomas, 1959. Pp. 313. $6.75.

The author has chosen his title in order to avoid the restrictions often implied in such titles as "philosophy of science" or "scientific philosophy." He wishes to stress the many-sidedness of the relation between philosophy and science.

His first question is about the nature of science, in which he considers both formal and factual science. He next asks about the method of science, and distinguishes between discovery, testing, theory, hypothesis, and technique. Then he discusses the meaning of "scientific law." The next chapter deals with the levels of science and the levels of being, in which he accepts the hypothesis of levels of reality. The next two chapters examine several cases of reductionism: the notion that computing machines think and the attempt to reduce physics to mechanics. The final three chapters deal with special problems in theoretical physics. First, the theory of complementarity is discussed, and its scientific and philosophical status is radically questioned; secondly, the author refers to this "crisis in quantum mechanics" and concludes that new theories are called for; thirdly, the space-time approach to quantum electrodynamics is questioned.

On the whole, the author makes a successful attempt to avoid the self-defeating restrictions of positivism as well as the attitudes of uncritical acceptance and a-priori legislation in regard to scientific theories. It is unfortunate that he mistakes (or has too narrow a conception of the scope of) the work of some other philosophers of science and that there are lapses in the handling of the English language.

Campenhausen, Hans von. *The Fathers of the Greek Church.* Trans. Stanley Godman. New York: Pantheon Books, 1959. Pp. 170. $3.95.

This series of studies ranges from Justin to Cyril of Alexandria. Though the terms "philosophy" and "theology" are used often enough, there is little of significant interest for a philosopher or theologian in this volume; and all too often selection, emphasis, and interpretation are questionable.

Carnap, Rudolf. *Introduction to Semantics and Formalization of Logic.* "Studies in Semantics," Vols. I and II. 2 vols. in 1. Cambridge, Mass.: Harvard Univ. Press, 1959. Pp. 225, 159. $7.00.

———. *Introduction to Symbolic Logic and Its Applications.* New York: Dover Pubns., 1959. Pp. xiv + 241. Paper, $1.85.

The German original of this work was first published in 1954. The present translation was made by William H. Meyer and John Wilkinson but has been checked by the author himself, who has made both many minor corrections and some major changes. Among the latter listed by the author are the explanations of "language,"

"syntactical system," and "semantical system," an additional section on the formalization of syntax and semantics, another explication of linear order, a new distinction between a basic and an axiomatic language, and several changes in the axiom system. The bibliography has been brought up to date.

This book has been recognized as a classic, and it is very fortunate that such a careful translation has been made. All workers in symbolic logic will need a copy. The printing and production of the volume are excellent.

CARROLL, LEWIS. *Mathematical Recreations of Lewis Carroll.* Vol. I. *Symbolic Logic* and *The Game of Logic.* Vol. II. *Pillow Problems* and *A Tangled Tale.* New York: Dover Pubns., 1959. Vol. I, pp. xxxi + 199 + 96. Paper, $1.50. Vol. II, pp. xx + 109 + 152. Paper, $1.50.

The first of these four works was intended to be the first part of a work on symbolic logic. It contains a method of notation and some simple rules. Its chief value lies in the interesting examples and problems proposed for solution—the author is able to be humorous without being banal. Teachers of logic courses could well assign some of the problems for class exercises. The second work, *The Game of Logic,* presents an exercise through the use of a diagram and colored counters. As a supplement or variation on some of the traditional diagrams these might also be of help to a teacher; and, again, the exercises might be usefull. The material contained in the second volume is largely mathematical, being like puzzles to be solved.

CARY, M., and HAARHOFF, T. J. *Life and Thought in the Greek and Roman World.* New York: Barnes & Noble, September, 1959. $3.50.

‡ CHABOD, FEDERICO. *Machiavelli and the Renaissance.* Trans. from the Italian by David Moore. Introd. by A. P. D'Entrèves. Cambridge: Harvard Univ. Press, 1959. Pp. 276. $5.50.

‡ CHADWICK, HENRY. *The Sentences of Sextus.* New York: Cambridge Univ. Press, 1959. Pp. 204. $5.50.

CHARLESWORTH, MAXWELL JOHN. *Philosophy and Linguistic Analysis.* "Duquesne Studies, Philosophical Series," 9. Pittsburgh: Duquesne Univ., 1959. Pp. xiii + 234. $4.50; paper, $4.75.

This is a historical and critical examination of the school of philosophical thought that is often called "analysis." After a general introduction, successive chapters deal with G. E. Moore, Bertrand Russell, Wittgenstein, Ayer, and the schools of Cambridge and Oxford. The last chapter is a conclusion and evaluation.

This is the most detailed and complete study yet done by a Thomist of a movement and a field of work whose importance cannot be denied. It has therefore an obvious importance; perhaps—less obviously—the analysts themselves could profit from this examination and critique.

CHARLTON, DONALD. *Positivist Thought in France during the Second Empire, 1852-1870.* New York: Oxford Univ. Press, 1959. Pp. 251. $5.60.

CHENU, M. D., O.P. *Is Theology a Science?* Trans. A. H. N. Green-Armytage. "Twentieth Century Encyclopedia of Catholicism," Vol. II, Section 1. New York: Hawthorn Books; August, 1959. $2.95.

CHRISTIAN, ROBERT R. *Introduction to Logic and Sets.* Boston: Ginn & Co. Pp. 75. Paper, 90¢

CHRISTIAN, WILLIAM A. *An Interpretation of Whitehead's Metaphysics.* New Haven: Yale Univ. Press. Pp. 431. $6.00.

CHURCHMAN, C. WEST, and RATOOSH, PHILBURN (eds.). *Measurement.* New York: Wiley & Sons; July, 1959. $7.95.

‡ Clark, Mother Mary T., r.s.c.j. *Augustine, Philosopher of Freedom.* New York: Desclée Co., 1959. Pp. 273. $4.50.

This study of St. Augustine is broadly conceived. In the first part of the book, the Greek philosophers are studied and found not to provide the materials of St. Augustine's thought. In the second part, St. Augustine's own thought is examined, both chronologically in his writings and doctrinally, to see its content and coherence with his other doctrines. In the third part, St. Augustine's doctrine is compared with that of St. Anselm; St. Thomas's teaching is presented briefly; and some contemporary views on freedom are discussed and analyzed. There are a bibliography and an index.

The subject is an important one in itself; the author is also concerned to show that many scholars have somewhat misjudged St. Augustine.

Cohen, Morris Raphael. *Studies in Philosophy and Science.* [Reprint.] New York: F. Ungar Pub. Co. Pp. 278. $4.50.

Cohen, Morris Raphael, and Drabkin, Israel Edward, *A Source Book in Greek Science* [New ed.]. Cambridge: Harvard Univ. Press. Pp. 602. $7.50.

Collins, James. *God in Modern Philosophy.* Chicago: Henry Regnery, 1959. Pp. xii + 476. $6.50.

In spite of the impression that a small number of philosophers are trying to give, questions about our knowledge of the existence of God and the relation of the world to Him remain central and significant for philosophy. The present study is a historical exposition of the doctrines of God in modern philosophy, joined to a critical analysis of these doctrines. The value of such a study today is expressed by the author in his claim that "it is not that the alert philosopher today will make more progress in the study of God by consulting what his predecessors have thought on the matter, but rather that he cannot make any headway without such consultation" (p. ix).

The historical introduction to the modern problems is to be found on the one hand in Cusanus, Calvin, and Bruno, and on the other in skepticism. The next two chapters present the bipolar themes of God as a function in rationalism and the minimizing of God in empiricism. The fifth chapter considers the Enlightenment as a transitional period. Kant's position on God is treated at great length. The next two chapters again present bipolar themes: the Hegelian absolute on the one hand and atheism as naturalism on the other. Two contemporary themes are treated in the final expository chapters: that of God who is finite and in process, and God as attained by nonrational ways. The final chapter sums up the results of the critical analyses given throughout and relates them to a realistic metaphysics. There are extensive notes and a detailed bibliography.

This profound and original study is a contribution both to the understanding of modern philosophy and to the further development of a realistic metaphysics and natural theology.

‡ Copleston, Frederick, s.j. *A History of Philosophy.* Vol. IV, *Descartes to Leibniz.* Westminster: Newman Press, 1959. Pp. 381. $4.50.

———. *A History of Philosophy.* Vol. V, *Hobbes to Hume.* Westminster: Newman Press, 1959. Pp. 449. $4.75.

Crombie, Alastair Cameron. *Medieval and Early Modern Science.* Vols. I & II: *Science in the Middle Ages.* Pp. 318, 397. Garden City: Doubleday & Co. Paper, 95¢ each.

‡ Cruickshank, John. *Albert Camus and the Literature of Revolt.* New York: Oxford Univ. Press, 1959. Pp. 248. $5.75.

Dacier, A. *The Preface to Aristotle's Art of Poetry.* Los Angeles: Univ. of California Press, 1959. Paper, 60¢

D'Arcy, M. C., s.j. *Meaning and Matter of History.* New York: Farrar, Straus & Cudahy; August, 1959. $4.50.

[Darwin.] *Darwin's Biological Works.* New York: Cambridge Univ. Press; September, 1959. $7.50.

Davitt, Thomas E., s.j. *The Elements of Law.* Boston: Little, Brown & Co., 1959. Pp. 391. $9.00.

Dawson, Christopher. *The Movement of World Revolution.* New York: Sheed & Ward, 1959. Pp. 179. $3.00.

This is philosophical history by one of its most prominent advocates. In a relatively long introductory chapter, the author argues that European history is still the only history of civilization about which we know very much and that the development of world history, so much desired by many, can best be brought about from this vantage point. Next he examines the meaning of revolution in the Renaissance, the Reformation, and the Enlightenment. The next section considers the expansion of European culture into other cultural areas and even into primitive nations. The final section deals with Asia, its development, and its relation to the West and to Christianity.

[Descartes.] *Descartes' Earlier Philosophical Writings.* Trans. Laurence J. Lafleur. New York: Liberal Arts Press, 1959.

———. *Philosophy of Descartes.* Lincoln: Nebraska Book Co., 1959.

Deutsch, Felix (ed.). *On the Mysterious Leap from the Mind to the Body.* New York: International Univ. Press, 1959. Pp. 282. $5.00.

Dewey, Ernest W. *A Three Dimensional Graph of Value Relations.* "Arts and Sciences Studies, Humanities Series" No. 5. Stillwater: Oklahoma State Univ., 1959. Pp. 11. Paper.

This is an attempt to portray graphically the relations between values as proposed by Nicolai Hartmann. He takes the view that virtue is the synthesis of two oppositional values over against two disvalues. In addition, he considers that higher values are conditioned by the lower, so that the lower values are stronger than the higher, yet are inferior in value rank. The author then tries to combine these relationships into a single graph, in terms of which he believes that we can more easily understand the multiple relationships which any goodness has.

Dicarlo, Louis M. *Our Educational Dilemma.* Syracuse, N.Y.: Syracuse Univ. Press, 1959. Pp. 51. $2.00. Paper, $1.00.

Dondero, Brother E. Austin. *Subliminal Perception and Set.* Washington, D.C.: Catholic Univ. of America Press, 1959. Pp. 40. Paper, 50¢

Dunlop, D. M. (ed.). *The Fusūl al-Madanī of Al-Fārābī.* Trans. with introd. by D. M. Dunlop. New York: Cambridge Univ. Press, 1959. Pp. 210. $13.50.

Duns Scotus Philosophical Association Convention Report, 1959. Vol. XXIII. Cleveland: Our Lady of Angels Seminary, 1959. Pp. x + 189. Paper.

This volume contains the papers read at the annual convention, together with a few from other occasions. Bennet Spivey, o.f.m., in "The Origin of the Philosophy in the Declaration of Independence," traces the ideas to Locke and Bellarmine. Irvin Tye, o.f.m., in "The Two Roads of Technology," shows that man can use technology to bring about a better world or lose himself. Arthur Feltman, o.f.m., in "Is Capital Punishment Justifiable?" argues that it is not an effective deterrent today. Vernon Olmer, o.f.m., in "Scheler's Notion of Love," gives an analysis of that philosophical position. Leander Zimmerman, o.f.m., in "An Evaluation of the Scholastic Theory of

Sense Cognition in the Light of the Ames Experiments," finds that the evidence does not destroy the traditional doctrine. Isaac Braun, O.F.M., in "Right-to-Work Laws—Just or Unjust?" considers the various arguments and concludes that they are unjust.

In the second part, the first entry is a debate on the Supreme Court decision concerning integration, by Tobias Baxter, O.F.M., and Russell Rexing, O.F.M. Leon Reuter, O.F.M., in "Homeostasis and the Philosophy of Organism," concludes that "negative feedback" is not a sufficient explanation of life. LeRoy Runde, O.F.M., has an expository paper, "The Role of Concentration in Reading."

ECKARDT, URSULA M. VON. *The Pursuit of Happiness in the Democratic Creed.* Introd. by Carl Friedrich. New York: Praeger, 1959. Pp. 430. $5.50.

EDEL, MAY, and EDEL, ABRAHAM. *Anthropology and Ethics.* Springfield: Charles C Thomas, 1959. Pp. 264. $4.50.

ELIADE, MIRCEA. *Cosmos and History.* New York: Harper & Bros.; Apr., 1959. $1.35.

———. *The Sacred and the Profane.* Trans. from the French by Willard R. Trask. New York: Harcourt, Brace & Co., 1959. Pp. 256. $4.50.

ELIADE, MIRCEA, and KITAGAWA, JOSEPH M. (eds.) *The History of Religions.* Chicago: Univ. of Chicago Press, 1959. Pp. 192. $5.00.

[EMERSON, RALPH WALDO.] *The Heart of Emerson's Journals.* Ed. Bliss Perry. New York: Dover Pubns., 1958. Pp. ix + 357. Paper, $1.85.

This one-volume selection from the ten volumes of Emerson's *Journals* was first published in 1926. In compiling this work, Mr. Perry closely followed the grouping of the years of Emerson's life as it is preserved in the complete edition of the *Journals.* Each group is prefixed by a brief editorial note explaining the events or circumstances to which Emerson makes allusion. There is a brief preface and an index. The quality of the binding and printing is excellent.

EMMET, E. R. *Thinking Clearly.* New York: Longmans, Green & Co.; Oct., 1959. $2.95.

Ethics for Teachers. [3d ed.] Washington, D.C.: Natl. Educ. Assn. of the U.S., Dept. of Classroom Teachers and Research Division, 1201 Sixteenth St., N.W. Pp. 24. Paper, 25¢

Etienne Gilson, Tribute Presented by His North American Students. Ed. Charles J. O'Neil. "Response" by Etienne Gilson. Milwaukee. Marquette Univ. Press, 1959. Pp. x + 347. $7.00.

This memorial volume in honor of M. Etienne Gilson on the occasion of his seventy-fifth birthday contains philosophical papers by twenty of his former students now working in the United States and Canada. Just as the authors are stationed in various parts of the continent, the subjects of the papers are varied. The topics treated include problems in the history of philosophy ancient, medieval, and modern; and more purely speculative problems in ethics, metaphysics, theory of knowledge, and natural theology. Yet the inspiration of M. Gilson can be seen in both types of studies, for the historical and textual papers have a doctrinal importance as well and the speculative ones make use of historical research.

All libraries and all scholars who are interested in possessing works of scholarship should possess this volume.

FAIRCHILD, JOHNSON EDDY. *Basic Beliefs.* New York: Sheridan House, 1959. Pp. 190. $4.00.

FARBER, MARVIN. *Naturalism and Subjectivism.* "American Lecture in Philosophy." Springfield, Ill.: Charles C Thomas; September, 1959.

Feldman, A. Bronson. *The Unconscious in History.* New York: Philosophical Lib., 1959. Pp. 269. $4.75.

This is a quasi-philosophical extension of Freudian theory to the race. Its scope can be gathered from a look at the contents. It deals with the birth of Christianity, the notion of mother-country and fatherland, the psychoanalysis of nations (war, culture, national traits), the economy, the cycles of history, and—the same techniques being used—a single recent event, the creation of the cult of Lincoln. Mere historical inaccuracies, of which the book has more than its share, would hardly bother the author, since his conviction of the validity of the theories used seems to be prior to the evidence. When love and the Œdipus complex explain everything, there seems little need for asking for evidence.

Ferguson, John. *Moral Values in the Ancient World.* New York: Barnes & Noble, 1959. Pp. 256. $4.50.

This book examines the moral ideas which guided the Greek, Roman, and Hebrew worlds during the classical period. There is an account of the cardinal virtues, of the place of friendship, of Plato's Love, of that love of mankind which the Greeks called *philanthropia*, of *homonoia*, of the pursuit of self-sufficiency or non-attachment, of the ancient Roman virtues and the new qualities the emperors tried to inculcate, and of the moral insight of the Jewish prophets. All these failed in some way or another to fulfil the moral aspirations of mankind, according to the author's analysis. Only the appearances of the Christian concept of *agape* provided an adequate moral concept for the men of the classical period.

Fitzsimons, M. A., and others (eds.). *The Image of Man.* Notre Dame: Univ. of Notre Dame Press. Pp. 457. $6.00.

‡ Foster, Kenelm. o.p. (ed.). *The Life of St. Thomas Aquinas.* Trans. with introd. by Rev. Kenelm Foster, o.p. Baltimore, Md.: Helicon Press, 1959. $5.50.

Frankl, Viktor E. *From Death-Camp to Existentialism.* Trans. from the German by Ilse Lasch; introd. by Gordon W. Allport. Boston: Beacon Press, 1959. Pp. 123. $3.00.

Fromm, Erich. *Sigmund Freud's Mission.* New York: Harper & Bros., 1959. Pp. 136. $3.00.

Gallagher, Thomas. *The Contemporary Status of the Notion of Existence—and Its Limitation in Thomistic Metaphysics.* Washington, D.C.: Catholic Univ. of America Press. Pp. 43. Paper, 50¢

Gay, Peter. *Voltaire's Politics.* Princeton, N.J.: Princeton Univ. Press. Pp. 429. $6.00.

Gilson, Etienne. *Elements of Christian Philosophy.* New York: Doubleday & Co.; Sept., 1959. Pp. 352.

———. *God and Philosophy.* New Haven: Yale Univ. Press, 1959. Pp. 165. Paper, 95¢

Glad, Donald D., and others. *Operational Values in Psychotherapy.* New York: Oxford Univ. Press. Pp. 339. $8.50.

Glass, H. B., and others (eds.). *Forerunners of Darwin.* Baltimore: Johns Hopkins Press, 1959. Pp. 471. $6.50.

Goldschmidt, Walter Rochs. *Man's Way.* New York: Henry Holt & Co., 1959. Pp. 253. $2.90.

Gould, Samuel B. *Knowledge Is Not Enough.* Yellow Springs, Ohio: Antioch Press, 1959. Pp. 232. $3.50.

This book contains fifteen addresses given by the president of Antioch College. The topics range from the goals of education to the practical problems of obtaining more teachers. The general point of view is inclusive and humanistic; the title is meant to indicate that

the college ought to be concerned with the moral, social, and "spiritual" dimensions of life as well as with the intellectual.

Great Cases in Psychoanalysis. Ed. Harold Greenwald. New York: Ballantine Books; Sept., 1959. 50¢

‡ Greaves, H. R. G. *The Foundations of Political Theory.* New York: Essential Books (Oxford), 1958. Pp. 208. $3.80.

Greenwood, David C. *Nature of Science.* New York: Philosophical Lib., June, 1959. $3.75.

Grene, Marjorie Glickman. *Introduction to Existentialism.* Chicago: Univ. of Chicago Press. Pp. 156. Paper, $1.25.

Gross, Llewellyn. *Symposium on Sociological Theory.* Evanston, Ill.: Row, Peterson & Co., 1959. Pp. xiv + 598. $7.25.

Gruber, Frederick Charles (ed.). *Aspects of Value.* Philadelphia: Univ. of Pennsylvania Press, 1959. Pp. 88. $2.75.

Gustavson, Reuben G.; Viereck, Peter; and Woodring, Paul. *Education in a Free Society.* "Pitcairn-Crabbe Foundation Lecture Series II," Vol. I. Pittsburgh: Univ. of Pittsburgh Press, 1958. Pp. 47. $3.00.

These three lectures were delivered at the University of Pittsburgh during the spring of 1958. Reuben G. Gustavson, in "The Impact of Science on a Free Society," discusses the accomplishments of modern science, America's role as "the watchdog of freedom" in today's world, and the need for improved courses in mathematics and biology if America is going to influence the world through science. Peter Viereck, in "Inwardness: The Dimension behind the Forehead," pleads against a short-sighted rejection of the humanities and religion in American education and highlights the need for "unadjusted men" to compensate for the "overadjusted men" of our society. Paul Woodring writes in "The Prospect for Higher Education" of the challenge of expansion now facing our colleges and of the need for maintaining standards of instruction and scholarship; he feels the gap between "academic" and "professional" educators must be bridged if America is to produce learned men who are also competent teachers.

Hallie, Philip Paul. *Maine de Biran, Reformer of Empiricism.* Cambridge: Harvard Univ. Press. Pp. 227. $4.50.

‡ Hanke, Lewis. *Aristotle and the American Indians.* Chicago: Henry Regnery Co., 1959. Pp. 174. $3.50.

Hardin, Garrett. *Nature and Man's Fate.* New York: Rinehart & Co., 1959. $6.00.

Hart, Charles Aloysius. *Thomistic Metaphysics.* Englewood Cliffs: Prentice-Hall, 1959. Pp. 431. $5.50.

Harvard, William C. *Henry Sidgwick and Later Utilitarian Political Philosophy.* Gainesville: Univ. of Florida Press; September, 1959. $6.00.

Hauser, Arnold. *The Philosophy of Art History.* New York: Alfred A. Knopf, 1959. Pp. 488. $7.50.

Hawley, Don. *The Nature of Things.* New York: Philosophical Lib., 1959. Pp. 187. $3.75.

Hayakawa, Samuel Ichiye (ed.). *Our Language and Our World.* New York: Harper & Bros., 1959. Pp. 414. $5.00.

Hegel, Wilhelm. *Encyclopedia of Philosophy.* New York: Philosophical Lib., August, 1959. $6.00.

Heidegger, Martin. *An Introduction to Metaphysics.* Trans. Ralph Manheim. New Haven, Conn.: Yale Univ. Press, 1959. Pp. 214. $3.75.

———. *The Question of Being.* Trans. from the German by William Kluback and Jean T. Wilde. New York: Twayne Publishers. Pp. 109. $3.00.

Himmelfarb, Gertrude. *Darwin and the Darwinian Revolution.* Garden City, Doubleday & Co. Pp. 480. $5.95.

Hirschberger, Johannes. *The History of Philosophy.* Vol. II. Trans. Anthony N. Fuerst. With a section on "American Philosophical Thought" by Donald A. Gallagher. Milwaukee: Bruce Pub. Co., 1959. Pp. viii + 752. $9.50

This second volume continues the history of Western philosophy from Renaissance philosophy to the present time. The major figures are treated extensively (Kant, for example, is discussed for 87 pages), yet a very great number of minor figures are more briefly handled. For each major figure or movement a bibliography lists editions and studies; the translator has taken care to substitute English translations where possible, and English studies where they are equivalent or equally good. The translation is ordinarily good, only rarely awkward or misleading.

For this edition, a section (pp. 637-708) on American philosophy has been written by Donald A. Gallagher. Though brief, the presentation is complete, clear, and well written.

There is a complete index of names (with subdivisions) and a very detailed subject index (pp. 729-52). As a result, the book will serve as a reference tool as well as a textbook.

The author apparently believes in a continuously developing perennial philosophy; in ancient and medieval philosophy (treated in Volume I) this interpretation provides a special emphasis but can be sustained to some extent. The course of modern and contemporary philosophy is more difficult to interpret in this way; fortunately, the author usually keeps his expositions distinct from this evaluation and so provides objective and well-grounded accounts of the philosophies of this period.

Holland, L. Virginia. *Counterpoint. Kenneth Burke and Aristotle's Theories of Rhetoric.* New York: Philosophical Lib., 1959. Pp. xv + 128. $3.75.

This doctoral dissertation is an analysis and synthesis of Kenneth Burke's theories, and a comparison of them to Aristotle's. The first chapter examines Burke's notion of man, society, and the function of the speaker or writer as social critic. Burke's ideas on the function and definition of rhetoric, its scope, and its methods, are presented in the next three chapters, while chapters five to seven compare Burke and Aristotle on these three points. The final chapter summarizes the thesis.

The author is concerned with showing similarities (not necessarily dependence). Her point is well made. She does not deny differences, but perhaps the differences are more significant than they are made to seem. That man is best defined as an "actor," that the rhetorician is primarily a social critic, and that the ethical dimension of rhetoric consists in manipulating symbolic word magic—these basic views of Burke's make his immediate similarities to Aristotle seem superficial rather than essential.

Holloway, Maurice R., s.j. *An Introduction to Natural Theology.* New York: Appleton-Century-Crofts Co., Inc., 1959. Pp. xxv + 492. $4.00.

This textbook is intended for courses in natural theology at the college level. The book begins with an examination of the nature of natural theology and its relations to metaphysics, sacred theology, religion, and science. Then the possibility of the proof of the existence of God is discussed; after this, there is a careful analysis of *a posteriori* demonstration. These chapters are followed by a

presentation of the five ways of St. Thomas. The next two chapters take up man's knowledge of the Divine Nature, and the problem of naming God. Then come a chapter on the perfections of God, followed by other chapters on the absolute attributes, knowledge, and love in God. The final chapters are on creation, providence, and God as the end of man. A number of appendices deal with invalid philosophical proofs, agnosticism, invalid proofs from science, existentialism, atheism, and the natural desire for the beatific vision. There is a detailed index.

Throughout, there are frequent references to St. Thomas, and many texts are included. The presentation is well organized and very systematic; each chapter ends with a summary, definitions, and proofs, followed by a selected bibliography of readings.

HOLZMAN, DONALD, and YUKIHIKO, MOTOYAMA. *Japanese Religion and Philosophy.* "Univ. of Michigan Center for Japanese Studies. Bibliographical Series," No. 7. Ann Arbor: Univ. of Michigan Press. Pp. 108. Paper, $4.00.

HOOK, SIDNEY. *Political Power and Personal Freedom.* New York: Criterion Books; June, 1959. $7.50.

———. (ed.) *Psychoanalysis, Scientific Method and Philosophy.* New York: New York Univ. Press. Pp. 383. $5.00.

‡ HULL, L. W. H. *History and Philosophy of Science.* New York: Longmans, Green & Co., 1959. Pp. 351. $5.00.

[HUME, DAVID.] *Philosophy of Hume.* Lincoln: Nebraska Book Co., 1959.

HUPPÉ, BERNARD FELIX. *Doctrine and Poetry.* New York: Univ. Publishers. Pp. 254. $6.00.

‡ [ISRAELI, ISAAC.] *Isaac Israeli, a Neoplatonic Philosopher of the Early Tenth Century.* Ed. and trans. by A. Altmann and S. M. Stern. New York: Oxford Book Co., 1958. Pp. 252. $4.80.

JASPERS, KARL. *The Idea of the University.* Ed. Karl W. Deutsch; introd. by Robert Ulich; trans. from the German by H. A. T. Reiche and H. F. Vanderschmidt. Boston: Beacon Press, 1959. Pp. 155. $3.75.

———. *Truth and Symbol from 'Von der Wahrheit.'* Trans. Jean T. Wilde, William Kluback, and William Kimmel. New York: Twayne Publishers, 1959. Pp. 79. $3.25.

JOHNSON, EDGAR N. *An Introduction to the History of the Western Tradition.* [2 vols.] Boston: Ginn & Co., 1959. Vol. I, pp. 831; Vol. II, pp. 806. $8.00 ea.

JOHNSTONE, HENRY W., JR. *Philosophy and Argument.* Philadelphia: Pennsylvania State Univ. Press; May, 1959. $4.00.

JONES, HOWARD MUMFORD. *One Great Society.* New York: Harcourt, Brace & Co., 1959. Pp. 254. $4.50.

KAISER, BROTHER F. JAMES. *The Concept of Conscience According to John Henry Newman.* Washington, D.C.: Catholic Univ. of America Press. Pp. 317. Paper, $3.25.

KALLEN, HORACE M. *Study of Liberty.* Yellow Springs, Ohio: Antioch Press; September, 1959. $3.00.

KANE, WILLIAM J. *The Philosophy of Relation in the Metaphysics of St. Thomas.* Washington, D.C.: Catholic Univ. of America Press. Pp. 62. Paper, 75¢

KANT, IMMANUEL. *Foundations of the Metaphysics of Morals* and *What Is Enlightenment?* Trans. by Lewis White Beck. New York: Liberal Arts Press; July, 1959. 75¢

KAUFMANN, WALTER ARNOLD. *From Shakespeare to Existentialism.* Boston: Beacon Press, 1959. Pp. 414. $5.95.

KEMENY, JOHN GEORGE. *A Philosopher Looks at Science.* Princeton, N.J.: Van Nostrand Co., 1959. Pp. 285. $4.95.

KESSLER, JOHN J. *A Metaphysics for Humanists.* St. Louis: Humanist Center, 1959. Pp. 14. Paper.

This pamphlet is a reprint from *Semantika,* Vol. V (1959), Nos. 1 and 2. The author begins with the fact that there is a common language structure. In accordance with semanticist theory, he refers the different kinds of words back to "the facts of science"; words that do not so refer he declares illegitimate.

KIERKEGAARD, SOREN. *Either/Or.* Garden City, N.Y.: Doubleday & Co., 1959. Vol. I, trans. David F. Swenson and Lillian Marwin Swenson, with revisions and foreword by Howard A. Johnson. Pp. 477. Paper, $1.45. Vol. II, trans. Walter Lowrie, with revisions and foreword by Howard A. Johnson. Pp. 393. Paper, $1.25.

[———.] *The Journals of Kierkegaard.* Ed. Alexander Dru. Gloucester, Mass.: Peter Smith, 1959. Pp. 254. $3.50.

KOCH, SIGMUND. *Psychology: A Study of a Science.* Vol. I, *Conceptual and Systematic;* Vol. II, *General Systematic Formulations. Learning, and Special Processes.* New York: McGraw-Hill, 1959. Pp. 716. $10.00.

KOESTLER, ARTHUR. *The Sleep Walkers.* Introd. by Herbert Butterfield. New York, Macmillan Co. Pp. 624. $6.50.

KÖHLER, WOLFGANG. *The Place of Value in a World of Facts.* New York: Meridian Books, 1959. Pp. 427. Paper, $1.95.

KOREN, HENRY J., C.S.SP. (ed.) *Readings in the Philosophy of Nature.* Westminster, Newman Press. Pp. 412. Paper, $2.25.

KÖRNER, STEPHAN. *Conceptual Thinking.* New York: Dover Pubns., 1959. Pp. viii + 301. Paper, $1.75.

First published in 1955, this book was noted in the "Current Bibliography" for November, 1957 (THE MODERN SCHOOLMAN, Vol. XXXV, Supplement, p. 11). Various reviewers have pointed out that it is a very worth-while analysis of the functions of concepts and of the differences between types of concepts. Though the author touches often upon metaphysical and epistemological considerations, he usually deals with them by means of logic.

The present edition is a corrected but otherwise unchanged reprinting. It is carefully and cleanly printed and bound sturdily enough to stand up under hard student use.

KREYCHE, ROBERT J. *First Philosophy: An Introductory Text in Metaphysics.* New York: Henry Holt and Co., 1959. Pp. xviii + 328. $4.00.

This textbook is written for college courses in metaphysics. An introduction discusses the nature of metaphysics. In the first section, on being, the problems of reality, change, matter and form, and essence and existence are treated. The second section, on the one and the many, treats potency and act, limitation and division, the analogy of being, and the analogy in our knowledge of being at some length. The third section is on the transcendentals in general and on the one, the true, and the good. The fourth section is on being and the causes of being; this deals with the efficient cause, both as cause of change and as cause of being, and also with final and exemplary causes. The fifth section is on the categories, especially substance, and accidents in general. There is a bibliography of suggested readings and an index.

The chapters are carefully organized, and each chapter is followed by review questions.

KRIKORIAN, YERVANT HOVHANNES, and EDEL, ABRAHAM (eds.). *Contemporary Philosophic Problems.* New York: Macmillan Co., 1959. Pp. 723. $7.00.

Krutch, Joseph Wood. *Human Nature and the Human Condition.* New York: Random House, 1959. Pp. 211. $3.95.

Lamont, Corliss. *The Illusion of Immortality.* 3d ed. Introd. by John Dewey. New York: Philosophical Lib., 1959. Pp. 318. $3.95.

‡ Landau, Rom. *The Philosophy of Ibn 'Arabi.* "Ethical and Religious Classics of East and West," No. 22. New York: Macmillan Co., 1959. Pp. 126. $3.25.

Langan, Thomas D. *Meaning of Heidegger.* New York: Columbia Univ. Press; September, 1959. $4.50.

Lapiere, Richard Tracy. *The Freudian Ethic.* New York: Duell, Sloan & Pearce, 1959. Pp. 309. $5.00.

Leetham, Claude. *Rosmini.* Introd. by Giuseppe Bozzetti. Baltimore, Md.: Helicon Press, 1959. Pp. 508. $7.50.

Lefevre, Robert. *The Nature of Man and His Government.* Caldwell, Idaho: Caxton Printers, 1959. Pp. 64. Paper, $1.00.

Leibrecht, Walter (ed.). *Religion and Culture.* New York: Harper & Bros., 1959. Pp. 410. $7.50.

Lemaitre, Solange. *Hinduism.* Trans. from the French by John-Francis Brown. New York: Hawthorn Books, 1959. Pp. 126. $2.95.

Lerner, Daniel (ed.). *The Human Meaning of the Social Sciences.* New York: Meridian Books, 1959. Pp. 323. Paper, $1.45.

[Locke, John.] *Locke's Two Treatises of Government.* Ed. with an introd. by Peter Laslett. New York: Cambridge Univ. Press, 1959. Pp. 530. $14.00.

Loewenberg, Jacob. *Reason and the Nature of Things.* La Salle, Ill..; Open Court Pub. Co. Pp. 395. $4.50.

Logical Positivism. Ed. A. J. Ayer. Glencoe: Free Press, 1959. $6.00.

Lynch, William F., s.j. *An Approach to the Metaphysics of Plato through the 'Parmenides.'* Washington: Georgetown Univ. Press, 1959. Distrib. by University Publishers, New York. Pp. xiii + 255. $6.00.

This new approach to Plato's thought arises from the author's conviction that the *Parmenides* is almost a summary of basic metaphysical positions. After an introduction and a single chapter devoted to the first part of the dialogue, the author takes up each of the Hypotheses in turn and submits them to a very detailed logical, and sometimes textual, analysis. In his view, the Platonic metaphysics is a philosophy of unity, and it is on this ground that he finds consistency and coherence in the dialogue.

Platonic scholars will want to weigh this book carefully.

———. *The Image Industries.* New York: Sheed & Ward, 1959. Pp. 159. $3.50.

This is a reflective book about the arts, especially moving pictures and television. The author begins with a consideration of the sources of these activities and finds them effectively monopolistic. These sources produce an art that confuses fantasy and reality, hides reality with a glossy finish, prettifies, and disguises. There is little deep sensibility; the emotional responses are flat and superficial; hence, most of the important human emotions are left out. Moreover, instead of liberating the imagination, the artists, borrowing the advertisers' techniques, fix it on less important details. Instead of breadth, the producers indulge in quantitative exaggeration—thousands of actors, miles of scenery, and so on. In place of these limiting factors, the author pleads for courageous imagination on the part of artists, breadth of understanding among the critics, creativity among the theologians, and an interest on the part of universities.

MacGregor, Geddes. *Introduction to Religious Philosophy.* Boston: Houghton, Mifflin Co., 1959. Pp. 384. $4.50, paper, $2.95.

‡ Malcolm, Norman. *Dreaming.* New York: Humanities Press, 1959. Pp. 128. $2.50.

This is a study in the "conceptual problems" involved in statements about dreams. The author begins by showing that the phrase "I am asleep" cannot be meaningfully asserted. He goes on to say that "actions" during sleep go on only to the extent that a person is not entirely asleep but asleep in one way and waking in another. Then he discusses dreaming, which he says is an exception. But he handles it this way. A person experienced something; later on he finds out that the events did not happen; hence he infers that he dreamt about those happenings. He maintains that a person can legitimately talk about his own dreams as they present themselves to him when he talks about them. But such questions as, Did he really dream this? When did he dream it and for how long? Did he have images or other mental processes in his sleep?—all such questions he asserts to be meaningless. Obviously the author is using the very narrow criterion of meaningfulness favored by one wing of the language analysts; namely, that there must be a present external referent. It is doubtful whether this part of the book is going to be at all helpful to psychologists. Finally, in the last several chapters, the author tries to show that one of the typical skeptical objections to certitude (How do I know that I am not dreaming?) is a pseudo-question. Unfortunately, the efficacy of this solution is involved in the difficulties of his prior analysis of dreaming itself.

Mandler, George, and Kessen, William. *Language of Psychology.* New York: Wiley & Sons; May, 1959. $6.75.

Manuel, Frank Edward. *The Eighteenth Century Confronts the Gods.* Cambridge: Harvard Univ. Press, 1959. Pp. 352. $6.75.

‡ Maritain, Jacques. *The Degrees of Knowledge.* Trans. under the supervision of Gerald B. Phelan. New York: Chas. Scribner's Sons, 1959. Pp. xix + 476. $7.50.

This work has been hailed as one of the major writings of contemporary Thomism, and it is not necessary to detail its contents to informed philosophers. Neither are the difficulties of the previous translation unknown. The present translation has been done very carefully and checked by the team of translators. All the content of the fourth French edition (1946) has been included; the only new matter is a redaction of Appendix IV, "On the Notion of Subsistence," which is dated 1954. Thanks to the translators and to the publisher, it will now be possible to refer students to this work in the expectation that they will be able to understand it without recourse to the French.

‡ Martin, Richard Milton. *The Notion of Analytic Truth.* Philadelphia: Univ. of Pennsylvania Press, 1959. Pp. 139. $5.00.

Martin, William Oliver. *Metaphysics and Ideology.* "The Aquinas Lecture," 1959. Milwaukee: Marquette Univ. Press, 1959. Pp. 104. $2.50.

The author tries to formulate the relationship between metaphysics and ideology. He sets up four criteria for a genuine metaphysics and finds that these criteria are fulfilled principally in the tradition of moderate realism of "Thomism" in a broad sense. These criteria are: autonomy, continuity, system, and adequacy. An "autonomous" metaphysics must have its own object, evidence, and principles. A "continuous" metaphysics must manifest historical development and refinement. A "systematic" metaphysics must be coherently organized in such a way as to allow for development without espousing skepticism; it must be open at one end but not

both ends. An "adequate" metaphysics not only possesses and can account for certain philosophical truths but is open to further truths. Professor Martin distinguishes metaphysics as he has described it from ideology, which is "an instrument for dealing with life-situations." Ideology examines reality with an eye to practice; it aims at putting ideas to work; it is radically antiphilosophical in its subordination of the objective order to human needs and in its polemics against those genuine metaphysicians who insist on ontological and ethical truth.

MARX, KARL, and ENGELS, FRIEDRICH. *Basic Writings on Politics and Philosophy.* Ed. Lewis S. Feuer. Garden City: Doubleday & Co., 1959. $1.25.

MASCIA, CARMIN. *Logic according to the Principles of Aristotle.* Loretto, Pa.: Mariale Press, 1959. $1.50.

———. *Metaphysics.* Loretto, Pa.: Mariale Press; Spring, 1960.

MASLOW, ABRAHAM HAROLD (ed.). *New Knowledge in Human Values.* Foreword by Pitirim A. Sorokin. New York: Harper & Bros., 1959. Pp. 282. $4.50.

MASON, A., and LEACH, R. *In Quest of Freedom.* Englewood Cliffs, N.J.: Prentice-Hall; May, 1959. $6.95.

MASON, MICHAEL. *The Center of Hilarity.* New York: Sheed & Ward, 1959. Pp. ix + 266. $4.50.

This book is a reflective, informal essay on the Christian, human attitude toward life. The author contends that this attitude is at the center of opposing forces; it is not a passive quiescence but an active maintaining of balance. The author has a considerable historical knowledge which is at the service of this theme, but the major tool of his analysis is literary criticism. Its object ranges over many works in passing, spends much of its time on T. S. Eliot and G. K. Chesterton, and makes a somewhat briefer but intense examination of Shakespeare. The theme of the work and its handling are Chestertonian, especially the notion that comedy is the greatest dramatic form.

‡ MAYS, W. *The Philosophy of Whitehead.* New York: Macmillan Co., 1959. Pp. 259. $4.25.

The author maintains that the philosophy of Whitehead is more coherent than is commonly supposed and that its basic elements are physical and logical concepts. He divides his study into two parts: the structure and the dynamics of the philosophy. In the first part, after some introductory material on the nature of that philosophy and its relation to contemporary language analysis, he discusses natural theology, eternal objects, the algebraic method, the extensive continuum, and the method of extensive abstraction. In the second part, he takes up prehension, perception, consciousness, change, causality and time, society, organism, physical theory, and determinism and free will. There are two appendices (one on probability, the other on the multiple location theory of perception) and an index, which is quite detailed.

MEAD, HUNTER. *Types and Problems of Philosophy.* New York: Henry Holt & Co., 1959. Pp. 474. $5.50.

MESSINESI, XENOPHON LEON. *Meet the Ancient Greeks.* Caldwell, Idaho: Caxton Printers, 1959. Pp. 261. $5.00.

MEYERHOFF, HANS (comp.). *The Philosophy of History in Our Time. An Anthology.* Garden City, Doubleday & Co. Pp. 358. Paper, $1.25.

[MILL, JOHN STUART.] *Prefaces to Liberty. Selected Writings of John Stuart Mill.* Ed. Bernard Wishy. Boston: Beacon Press; Dec., 1959. $3.95.

MILLER, DAVID L. *Modern Science and Human Freedom.* Austin: Univ. of Texas Press, 1959. Pp. 310. $6.00.

Miller, Henry, and Shorr, Philip (eds.). *Essays in Social Science.* Brooklyn: Philip Shorr, 4627 Beach St. Pp. 171. $2.00.

Miller, Randolph Crump, and others. *What Is the Nature of Man?* Philadelphia: Christian Education Press, 1959. Pp. 218. $3.00.

Minnema, Theodore. *The Social Ethics of Reinhold Niebuhr.* Grand Rapids, Mich.: Eerdmans Pub. Co. Pp. 132. $3.00.

Mixter, R. L. (ed). *100 Years After Darwin.* Grand Rapids, Mich.: Eerdmans Publishing Co.; August, 1959. $4.00.

‡ Montefiore, Alan. *A Modern Introduction to Moral Philosophy.* New York: Praeger, 1959. Pp. 220. $4.00.

Moore, Gerald Edward. *Philosophical Studies.* Paterson, N.J.: Littlefield, Adams, 1959. Pp. 350. Paper, $1.75.

Moore, Thomas V. *Heroic Sanctity and Insanity.* New York: Grune & Stratton; May, 1959.

Morray, Joseph P. *Pride of State.* Boston: Beacon Press; May, 1959. $4.00.

Morris, Clarence (ed.). *The Great Legal Philosophers.* Philadelphia: Univ. of Pennsylvania Press, 1959. Pp. 571. $10.00.

Mortimer, Ernest. *Blaise Pascal.* New York: Harper & Bros.; June, 1959. $4.00.

Murty, K. Satchidananda. *Revelation and Reason in the Advaita Vedanta.* New York: Columbia Univ. Press; September, 1959. $7.50.

Neff, Mary V. *Ethics for Everyday Living.* Chicago, Science Research Associates. Pp. 48. Paper, 50¢

Northrop, F. S. C. *Complexity of Legal and Ethical Experience.* Boston: Little, Brown & Co.; September, 1959.

———. *The Logic of the Sciences and the Humanities.* New York: Meridian Books, 1959. Pp. 416. Paper, $1.45.

O'Brien, Justin (ed.). *From the N. R. F.* Ed. with introd. by Justin O'Brien. New York: Meridian Books, 1959. $1.95.

Ogden, Charles Kay, and Richards, Ivor Armstrong. *The Meaning of Meanings.* New York: Harcourt, Brace & Co., 1959. Pp. 385. Paper, $2.25.

Overstreet, H. A. *Mature Mind.* 10th edition. New York: Norton & Co.; August, 1959. $3.95.

Page, L. Elwin. *The Philosophy of Socrates Smith.* New York, Comet Press. Pp. 187. $3.50.

Parker, Francis H., and Veatch, Henry B. *Logic as a Human Instrument.* New York: Harper & Bros., 1959. Pp. xviii + 422.

This textbook of logic is intended as an introductory book for college students. It covers the matter traditionally treated in this field: concepts, propositions, and argument. It makes use of traditional Aristotelian views and expositions, but also of a certain amount of modern techniques and views. It is unusually well written for a textbook; the examples are well chosen and at the same time meaningful to students. The authors intend to treat logic not so much for its own sake as a highly specialized discipline but rather as an instrument of knowing, and particularly as a philosophical instrument. In this they succeed so well that the book can be thought of as a text for a combined course in logic and introduction to philosophy.

In addition, the authors deal with a number of points that are outside formal logic strictly conceived. They treat the nature of concept as sign, the nature of beings of reason, the nature of the categories, the distinction between substance and accident, the problem of universals and moderate realism. Most of these points are very well done. In dealing with the proposition, they begin with a brief

treatment of the distinction between essence and existence, and deal with the difficult matter of *suppositio* in terms of "designation." These points also are well done. In the third part, they show the connection between argumentation and causality among beings, the objections to both induction and deduction, and hypothesis. Here the treatment is less satisfactory. The inductive origin of first principles is not clearly differentiated from scientific induction; the latter is said to be based on real natures. The function of deduction *within* scientific induction is not seen, because it seems that the authors too closely assimilate scientific induction to the abstraction of natures in concepts. Hypothesis, too, is assimilated to induction thus understood. Hence, the indirect, constructural character of scientific theory is entirely overshadowed by the reflections on its truth-value. But these faults leave the merits of the book undiminished.

PARKER, THOMAS HENRY LOUIS. *Calvin's Doctrine of the Knowledge of God.* (Rev. ed.) Grand Rapids, Mich.: Eerdmans Pub. Co., 1959. Pp. 136. $3.00.

PATTERSON, CECIL HOLDEN. *Counseling and Psychotherapy.* New York: Harper & Bros., 1959. Pp. 334. $6.00.

PEARSON, DONALD STUART. *Creative Image.* State College, Pa.: Author, P. O. Box 413, 1959. Pp. 111. $2.75.

PETERFREUND, SHELDON P. *Introduction to American Philosophy.* New York: Odyssey Press, 1959. $3.50.

PETERSON, HOUSTON, and BAYLEY, JAMES (eds.). *Essays in Philosophy. From David Hume to Bertrand Russell.* New York: Pocket Books, 1959. Pp. 522. Paper, 50¢

‡ PIAGET, JEAN. *The Language and Thought of the Child.* [3d ed.] New York: Humanities Press, 1959. Pp. 312. $5.00.

PLANCK, MAX. *The New Science.* Trans. from the German. New York: Meridian Books, 1959. Pp. 352. $5.00.

[PLATO.] *Plato—Republic and Dialogues.* Lincoln: Nebraska Book Co., 1959.

———. *Plato's Phaedo.* Trans. R. S. Bluck. New York: Liberal Arts Press; August, 1959. $1.25.

———. *Plato's Theaetetus: Theory of Knowledge.* Trans. Francis M. Cornford. New York: Liberal Arts Press; June, 1959. $1.00.

———. *Plato's Timaeus.* Trans. Francis M. Cornford. New York: Liberal Arts Press; August, 1959. 80¢

POINCARÉ, HENRI. *The Value of Science.* Trans. George Bruce Halsted. New York: Dover Pubns., 1958. Pp. iii + 147. Paper, $1.35.

This reprint of representative essays by Poincaré is based on G. B. Halsted's authorized translation, which first appeared in 1913. It contains an author's and a translator's introduction.

‡ POLANYI, MICHAEL. *The Study of Man.* Chicago: Univ. of Chicago Press, 1959. Pp. 102. $1.75.

This set of three lectures (being the "Lindsay Memorial Lectures" for 1958) is both an introduction to, and a carrying further of, the author's recent volume, *Personal Knowledge.* The first two lectures of this series recapitulate the major theme of the earlier work. In the first, the author shows that knowledge is not an objective proposition or a material to be put on book or tape but an activity of a knowing person; that, though language and other symbolic expression is the major tool of clarification, it so presupposes personal activity as to be empty and meaningless without it. In the second lecture, the author shows that man, having developed "intellectual passions," should follow them (and thereby unify his pursuit of truth and good, of fact and value) rather than deny or reduce them.

In the third lecture, the author shows how history is concerned with the *actions* of men, which cannot be understood merely mechanically or objectively.

POPPER, KARL RAIMUND. *The Logic of Scientific Discovery.* Trans. from the German by the author. New York: Basic Books. 1959. Pp. 479. $7.50.

POUND, ROSCOE. *An Introduction to the Philosophy of Law.* New Haven: Yale Univ. Press, 1959. Pp. 209. Paper, 95¢

POYNTER, F. N. L. *The History and Philosophy of Knowledge of the Brain and Its Functions.* Springfield, Ill.: Charles C Thomas, 1959. Pp. 284. $5.50.

Psychoanalysis and Contemporary Thought. Ed. John D. Sutherland. New York: Grove Press, 1959. Pp. 149. $5.00; paper, $2.95.

QUETIF, J., and ECHARD, J. *Scriptores Ordinis Predicatorum Recensiti, Notisque Historicis et Criticis Illustrati.* "Burt Franklin Bibliographical and Reference Series," No. 16. New York, Burt Franklin. 4 vols. Set, $200.00; prepub., $175.000.

QUINE, WILLARD VAN ORMAN. *Methods of Logic.* (Rev. ed.) New York: Henry Holt & Co., 1959. Pp. 291. $4.75.

RANK, OTTO. *Beyond Psychology.* New York: Dover Pubns, 1959. Pp. 291. Paper, $1.75.

First published in 1941, this work was the last production of a man who, though he is not in the first order of the founders of modern psychiatry, is still an original and forceful thinker who has made many important contributions. In this work, he contends that psychology, being a rational science, cannot adequately explain human life. As a basis for this claim he points out various non-rational factors, such as the kinds of love, social interaction, sexual differentiation.

RAVEN, CHARLES EARLE. *Science, Medicine and Morals.* New York: Harper & Bros., 1959. Pp. 189. $3.50.

REESE, WILLIAM. *The Ascent from Below.* Boston: Houghton Mifflin Co., 1959. Pp. 490. $5.00.

REGIS, L. M., O.P. *Epistemology.* Trans. Imelda Choquette Byrne. New York: Macmillan Co., 1959. Pp. xii + 549. $6.50.

This third volume in the "Christian Wisdom Series" is a textbook, or, perhaps better, a monograph. It consists of four parts. The first part explains what a problem is, what the epistemological problem properly is, and engages in a penetrating and lively criticism of contemporary "Scholastic" epistemologies; it concludes with a full account of St. Thomas's method. The second part is the longest; it deals with the nature of knowledge. It begins by insisting that there are many kinds of knowledge and finds in them the presence of other things; it concludes with an examination of the object as term of knowledge. The third part considers truth; it considers the judgment as the perfect act of knowing and as the locus of truth. The fourth part deals with infallible truth: the nature of infallibility, the first principles, and infallible knowledge of mediate truth. There are copious notes and an index.

This book is first and foremost a text in Thomistic *epistemology*; that is, it is concerned mainly with those modes of knowledge that St. Thomas called *scientia* or *episteme*. In explaining what philosophical knowledge is, the author has a tool for distinguishing such knowledge from science (in its contemporary sense). But since the latter is not treated for its own sake, it is not given a complete analysis.

‡ Reichenbach, Hans. *Modern Philosophy of Science. Selected Essays.* Ed. and trans. by Maria Reichenbach. New York: Humanities Press, 1959. Pp. ix + 214. $5.50.

This volume contains eight essays, only one of which has appeared in English before. None of them deals with particular detailed topics. The first two discuss theories of relativity and of motion; the third, causality and probability. The fourth is the author's summary of the content of a philosophy of nature. The fifth returns to the principle of causality and the question of its empirical confirmation. The sixth discusses rationalism and empiricism (and was published in English). The seventh and eighth have not previously been published; they were left unfinished and were completed by the editor. The seventh deals with the freedom of the will; the eighth with the nature of ethical statements.

There is a bibliography of Reichenbach's works and an index to the present volume.

Reilly, William J. *In Search of a Working Philosophy of Life.* New York: Harper & Bros.; July, 1959. $2.95.

———. *The Philosophy of Space and Time.* Trans. from the German by Maria Reichenbach and John Freund. New York, Dover Pubns. Pp. 311. Paper, $2.45.

Rice, Eugene F. *The Renaissance Idea of Wisdom.* Cambridge, Harvard Univ. Press. Pp. 229. $4.75.

Rieff, Philip. *Freud.* New York, Viking Press. Pp. 413. $6.00.

Roberts, David E. *Existentialism and Religious Beliefs.* New York: Oxford Book Co.; September, 1959. $1.75.

Rose, H. J. *Religion in Greece and Rome.* New York: Harper & Bros.; September, 1959. $1.60.

Ross, Alf. *On Law and Justice.* Berkeley: Univ. of California Press, 1959. Pp. 394. $6.00.

Ross, William David. *Aristotle.* New York: Meridian Books, 1959. Pp. 320. Paper, $1.45.

Rotand, Jean. *Can Man Be Modified?* Trans. from the French by Jonathan Griffin. New York: Basic Books, 1959. Pp. 105. $3.00.

Runes, Dagobert D. *Dictionary of Thought.* New York: Philosophical Lib., 1959. Pp. 152. $5.00.

This is a collection of short statements, definitions, and remarks about a large number of terms used in philosophy, politics, and common life. The author's strong point is his skill in aphorism and epigram. This is a style that frustrates the reviewer and does not encourage continuous reading. Yet every reader will find remarks that make him smile and others that make him think.

———. *Pictorial History of Philosophy.* New York: Philosophical Lib., August, 1959. $15.00.

Russell, Bertrand. *My Philosophical Development.* New York: Simon & Schuster; July, 1959. $3.50.

———. *The Problems of Philosophy.* New York: Oxford Univ. Press, 1959. Pp. 167. Paper, $1.25.

Russell, Bertrand, and Burroughs, John. *Two Modern Essays on Religion.* Hanover, N.H.: Westholm Pubns.; September, 1959. $5.00.

Ryle, Gilbert. *The Concept of Mind.* New York: Barnes & Noble, 1959. Pp. vi + 334. Paper, $2.25.

One of the earliest products of a particular kind of philosophical analysis was Ryle's *The Concept of Mind,* first published in 1949. Later works have not come up to the sparkle and impact of this book. It is, as is well known, an attack on Cartesian dualism and the theory of sense data. Part of its success lay in its assumption that these

theories were adequate examples of all philosophical psychology and epistemology, an assumption whose dubious validity has been pointed out repeatedly.

The present reprint is well printed and well bound (sewed rather than merely glued). But the price seems high if one considers what other publishers have been able to do with their quality paperback lines.

‡ SAMBURSKY, S. *Physics of the Stoics.* New York: Macmillan Co., 1959. Pp. xi + 153. $3.50.

This study is richly documented and, in addition, offers thirty pages of texts in translation, features which the modern student will be very grateful for. The author maintains that the most important physical notion of the Stoics was that of continuity, and so his first chapter studies it in detail. He then takes up the notions of pneuma and force, causality and determinism, and the relation between the whole and its parts, especially in connection with the Stoic idea of the cosmos. Throughout, the author wishes to show the similarity between these conceptions and those of modern science, and to show that Stoic thought was superior in this respect to other varieties of Greek thought. Perhaps it is this concern which leads the author to interpretations that seem to be historically inaccurate (for example, of the notion of free will and of the Aristotelian four causes).

SAYERS, EPHRAIM VERN, and MADDEN, WARD ELLIS. *Education and the Democratic Faith.* New York: Appleton-Century-Crofts, 1959. Pp. 484. $4.25.

SCHILPP, PAUL ARTHUR. *Albert Einstein.* 2 vols. New York: Harper & Bros.; September, 1959. $1.95 ea.

SCHIPPER, EDITH W., and SCHUH, EDWARD W. *A First Course in Modern Logic.* New York: Henry Holt & Co., 1959. Pp. 416. $4.50.

SCHUSCHNIGG, KURT VON. *An Introduction to the Law of Peace.* Milwaukee: Bruce Pub. Co., 1959. $9.50.

SELEKMAN. *Moral Philosophy for Management.* New York: McGraw-Hill Book Co.; May, 1959.

[SENECA.] *The Stoic Philosophy of Seneca.* Trans. and ed. Moses Hadas. Gloucester, Mass.: Peter Smith, 1959. Pp. 261. $3.00.

SHINN, ROGER L. *The Existentialist Posture.* New York: Association Press, 1959. Pp. 128. Paper, 50¢

SMITH, BEN DAY. *Man and Science.* New York: Exposition Press, 1959. Pp. 126. $3.00.

[SPINOZA.] *Living Thoughts of Spinoza.* Com. by Arnold Zweig. Greenwich, Conn.: Fawcett Pubns,; June, 1959. Paper, 50¢

———. *Philosophy of Spinoza.* Lincoln: Nebraska Book Co., 1959.

———. *Spinoza's Earlier Philosophical Writings.* Trans. Frank A. Hayes. New York: Liberal Arts Press, 1959.

STEBBING, LIZZIE SUSAN. *Philosophy and the Physicists.* New York: Dover Pubns., 1959. Pp. 211. Paper, $1.65.

SUTHERLAND, JOHN DERG (ed.). *Psychoanalysis and Contemporary Thought.* Introd. by Sylvia Payne. New York: Grove Press, 1959. Pp. 149. Paper, $1.45.

TAMOSAITIS, ANICETUS, S.J. *Church and State in Maritain's Thought.* Chicago: 2345 West 56th Street, 1959. Pp. 125. Paper, $1.25.

This is a dissertation presented to the Gregorian University, Rome. After an introductory discussion of the present situation of Christendom and a biographical sketch of Maritain, the author investigates "what Maritain says and what he does not say on Church and State." He states the basic principles of Maritain's political philosophy, as well as his views on human history. Next he outlines the problem of

Church-state relationship and analyzes Maritain's application of his basic principles to the problem in its contemporary historical situation. The author adds a few critical comments; he regards Maritain's work in this area as highly valuable but in many respects still exploratory and tentative. There is a good bibliography of Maritain's writings and criticisms of Maritain's writings on the Church-state relationship.

TAUBER, EDWARD S., and GREEN, MAURICE R. *Prelogical Experience.* New York, Basic Books. Pp. 207. $3.75.

TAYLOR, HENRY OSBORN. *Thought and Expression in the Sixteenth Century.* 2nd rev. ed. New York: F. Ungar, 1959. Pp. 432. $9.00.

‡ TEILHARD DE CHARDIN, PIERRE, S.J. *The Phenomenon of Man.* Trans. Bernard Wall. New York: Harper & Bros., 1959. Pp. 318. $5.00.

Theories of History. Ed. Patrick Gardiner. Glencoe: Free Press, 1959. $8.50.

The Thomist Reader. Washington, D.C.: The Thomist Press, 1958. Pp. 136. $1.75.

THORPE, EARL E. *The Desertion of Man.* Foreword by Crane Brinton. Baton Rouge, Harrington Pubns. Pp. 207. $4.00.

TILLICH, PAUL JOHANNES. *The Courage to Be.* New Haven: Yale Univ. Press, 1959. Pp. 206. Paper, 95¢

———. *Theology of Culture.* New York: Oxford Book Co.; May, 1959. $4.00.

TOS, ALDO J. *A Critical Study of Modern American Views on Academic Freedom.* Washington, D.C.: Catholic Univ. of America Press. Pp. 75. Paper, 75¢

TRESMONTANT, CLAUDE. *Pierre Teilhard de Chardin.* Baltimore, Md.: Helicon Press, 1959. $3.00.

VALLON, MICHEL A. *Apostle of Freedom.* New York: Philosophical Lib.; September, 1959. $6.00.

VANN, GERALD, O.P. *The Paradise Tree. On Living the Symbols of the Church.* New York: Sheed & Ward, 1959. Pp. 320. $4.00.

Though this book is almost entirely an attempt to elucidate for the present generation the meaning of the symbols of the sacraments and the Mass, the introductory chapter deals with the function of symbols in general. The problem is not adequately solved here, but at least its importance is recognized.

VINE, MARGARET WILSON. *An Introduction to Sociological Theory.* New York: Longmans, Green & Co., 1959. Pp. 367. $4.50.

WADDELL, HELEN. *Peter Abélard.* Gloucester, Mass.: Peter Smith, 1959. Pp. 277. $3.25.

WALTZ, KENNETH N. *Man, the State, and War.* New York: Columbia Univ. Press; September, 1959. $5.00.

WARNER, W. LLOYD. *The Living and the Dead. A Study of the Symbolic Life of Americans.* New Haven: Yale Univ. Press, 1959. Pp. xii + 528. $7.50.

The study of symbols has been undertaken by historians of religion, theologians, literary critics, psychologists, but only rarely by philosophers. Yet a metaphysics and a theory of knowledge are implied by almost any approach to symbolism; and these implications are not always realized by the investigators, even when the study is undertaken in a spirit of open inquiry.

The present study could be called a study in social psychology, or anthropology. Its locale is "Yankee City," the fictionalized locale of four previous books on the life of a modern community. The book is divided into five parts. In the first, the symbols of politics are examined, centering around a political hero. In the second part, the

symbols of history are studied. In the third, the symbols studied are both secular and sacred: associations, parades and memorials, and especially cemeteries. The fourth part studies sacred symbol systems, especially Catholic and Protestant religious symbols. The fifth part is a statement of the theory and method underlying the book.

The book is an important contribution but needs serious, detailed criticism.

WEBER, MAX. *The Protestant Ethic and the Spirit of Capitalism.* Foreword by R. H. Tawney. Gloucester, Mass.: Peter Smith, 1959. Pp. 292. $3.50.

WEISS, PAUL. *Our Public Life.* Bloomington: Indiana Univ. Press, 1959. Pp. 256. $4.50.

This book is a study of the nature of society and the state and man's role within them. Successive chapters examine the kinds of classes which would constitute an ideal society, the basic rights of man, the state as a law-making and law-enforcing body, the natural law, the limitations of the state, and the functions of culture and religion within civilization. A final chapter discusses the prospects of civilization and offers suggestions for narrowing the gap between the ideal human society and our present world.

WEITZ, MORRIS. *Problems in Aesthetics.* New York: Macmillan Co., 1959. Pp. 697. $6.90.

WENDER, HERBERT. *The Growth of Modern Thought and Culture.* New York: Philosophical Lib., 1959. Pp. 215. $3.75.

WERTHEIMER, MAX. *Productive Thinking.* Rev. by Michael Wertheimer. New York: Harper & Bros., 1959. $4.50.

WEST, PAUL. *The Fossils of Piety.* New York: Vantage Press, 1959. Pp. 85. $2.75.

This essay on the humanist tradition examines it in a series of instances. The cases chosen are: Malroux (as an echo of Arnold and Pater); Sartre, Pavese, Camus; Hemingway and Jünger; and Santayana, Weil, Trilling. In each case, the author points out the insufficiency, the self-defeating movement of the attempt to escape both facts and ideals. It is his contention that humanism is trying to be a religion without any corresponding whole-hearted dedication (paradoxically most evident in those who talk most about commitment).

‡ WETTER, GUSTAV A., S.J. *Dialectical Materialism.* Trans. from the German by Peter Heath. New York: Praeger, 1959. Pp. 621. $10.00.

WHEELWRIGHT, PHILIP. *A Critical Introduction to Ethics* [3d ed.]. New York, Odyssey Press. $4.25.

WHITE, MORTON GABRIEL. *Religion, Politics and the Higher Learning.* Cambridge, Harvard Univ. Press. Pp. 150. $3.50.

WHITEHEAD, ALFRED NORT H. *Aims of Education and Other Essays.* New York: Macmillan Co.; June, 1959. $4.00.

———. *Modes of Thought.* New York: G. P. Putnam Sons. Pp. 249. Paper, $1.15.

———. *Symbolism.* "Barbour-Page Lectures," University of Virginia, 1927. New York: G. P. Putnam Sons, 1959. Pp. 96. Paper, 95¢

WHITTAKER, SIR EDMUND TAYLOR. *From Euclid to Eddington.* New York: Dover Pubns., 1959. Pp. 221. Paper, $1.35.

WINN, RALPH B. *Dictionary of Existentialism.* New York: Philosophical Lib.; September, 1959. $4.75.

ZARCHY, HARRY. *What Does a Scientist Do?* New York: Dodd, Mead & Co.; September, 1959. $2.50.

ZIMMERMANN, PAUL (ed.). *Darwin, Evolution and Creation.* St. Louis: Concordia Pub. Co.; August, 1959. $3.50.